District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 347611

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
PERMIAN TDS, LLC P.O. Box 788 Lovington, NM 88260	306958
	3. API Number 30-025-51904

4. Property Code	5. Property Name	6. Well No.
334614	COOMBES SWD	001

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	22	20S	33E	I	1630	S	200	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
I	22	20S	33E	I	1630	S	200	E	Lea

9. Pool Information

SWD;DEVONIAN-SILURIAN	97869

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		Private	3612
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	16250	Silurian		9/25/2023
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	26	20	106.5	1405	961	0
Int1	18.5	16	75	3365	809	0
Int2	14.75	13.375	61	5450	884	0
Int3	12.25	9.625	40	11530	1990	0
Prod	8.5	7.625	39	14935	211	11330

Casing/Cement Program: Additional Comments

Any changes to the casing program will seek NMOCD approval prior to implementation

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	10000	Hydril / Cameron / Equiva

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Patrick B McMahon	Approved By:	Paul F Kautz
Title:	Regulatory Manager	Title:	Geologist
Email Address:	pbm@heidellaw.com	Approved Date:	8/25/2023 Expiration Date: 8/25/2025
Date:	8/17/2023 Phone: 575-399-5031	Conditions of Approval Attached	

District I
1625 N. French Dr., Hobbs, NM 88240
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Phone: (505) 334-6178 Fax: (505) 334-6170
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1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Permian TDS, LLC P.O. Box 788 Lovington, NM 88260	306958
	3. API Number 30-025-51904

4. Property Code	5. Property Name	6. Well No.
334614	Coombes SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
SWD; Devonian - Silurian	97869

UIC Permit: SWD-1996

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	S	R	Fee	3,612'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	16,225'	Devonian - Silurian	TBD	Upon Approval

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
413.55' (USGS Site 323335103370601)	1.38-miles (CP-00789 POD1)	2.93-mile (Northwest)

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	106.5 lb/ft	1,405'	961	Surface
Intermediate 1	18.5"	16"	75 lb/ft	3,365'	809	Surface
Intermediate 2	14.75"	13.375"	61 lb/ft	5,450'	884	Surface
Intermediate 3	12.25"	9.625"	40 lb/ft	11,530'	1,990	Surface
Liner	8.50"	7.625"	39 lb/ft	11,330' - 14,935'	211	11,330' (TOL)
Tubing	N/A	7"	26 lb/ft	11,330'	N/A	N/A
Tubing	N/A	5.5"	17 lb/ft	14,890'	N/A	N/A

Casing/Cement Program: Additional Comments

Open Hole completion from 14,935' - 16,225' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Hydril, Cameron or equivalent

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Oliver Seekins

Printed name: Oliver Seekins

Title: Consultant

E-mail Address: oseekins@all-llc.com

Date: 8.14.23 Phone: 918-382-7581

OIL CONSERVATION DIVISION

Approved By: P Kautz

Title:

Approved Date: 08/25/2023 Expiration Date: 08/25/2024

Conditions of Approval Attached

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State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	97869	SWD; Devonian - Silurian

4 Property Code	5 Property Name	6 Well Number
334614	COOMBES SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
306958	PERMIAN TDS, LLC.	3612'

10 Surface Location

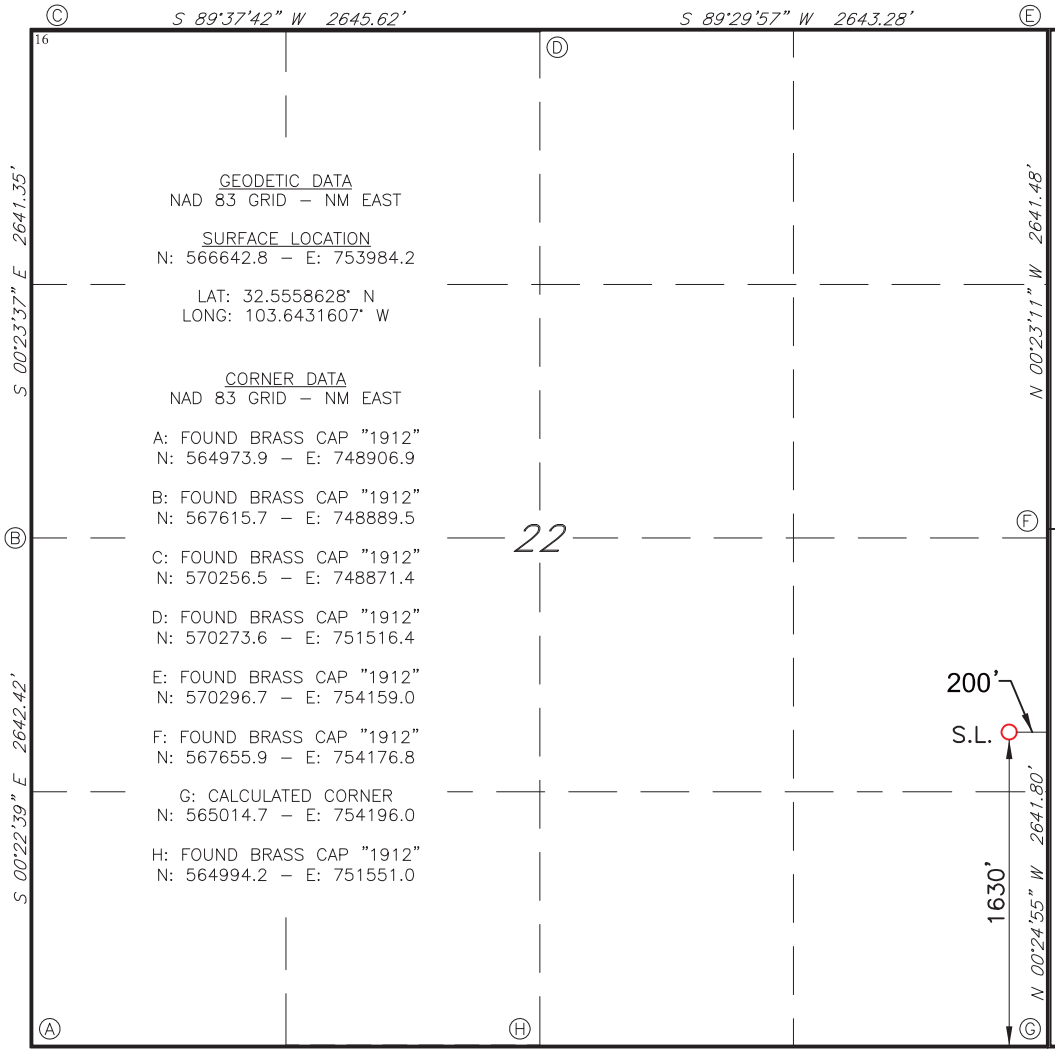
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
			SWD - 1996

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nathan Alleman 8/15/2023
Signature Date

Nathan Alleman
Printed Name

nate.alleman@aceadvisors.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

1-14-19
Date of Survey

Signature and Seal of Professional Surveyor

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No.: LS19010055

Permian TDS, LLC
Coombes SWD #1
1,630' FSL & 200' FEL
Section 22, Twp 20S, Rng 33E
Lea County, New Mexico

Proposed Drilling Plan for New SWD

1. **Geologic Information:** Devonian-Silurian geologic formations

The Devonian and Silurian Fusselman formations consist of carbonates rocks including dolomites, siliceous shallow water limestones, and deep-water chert intervals. Several thick sections of porous and permeable dolomites are present within these formations in the area. Geologic information and depths of formation tops were obtained from surrounding deep wells within the area of interest. Open hole injection interval is estimated to be from 14,935' to 16,225'. The top of the Rustler Formation is at approximately 1,380 feet plus 25 feet equals 1,405 feet to set bottom of the surface casing to protect the deepest underground sources of drinking water (USDWs).

Estimated Formation Top Depths:

Rustler - Top	1,380'
Salado - Base	3,230'
Yates	3,315'
Capitan Reef	3,420'
Delaware	5,425'
Bone Spring	8,025'
Wolfcamp	11,480'
Strawn	12,512'
Atoka	12,800'
Morrow	13,530'
Woodford	14,650'
Devonian	14,900'
Montoya	16,250'
Total Depth	16,225'

2. **Proposed Drilling Plan:**

a. Move in equipment, excavate cellar and install tinhorn, and then drill conductor hole and set and cement in conductor casing.
b. Mobilize drilling rig and rig up drilling rig and associated equipment onsite. Set up H_2S wind direction indicators and monitors; brief all personnel on Emergency Evacuation Routes and Site Health and Safety Plan.
c. Everyone onsite will have stop work authority.
d. Perform Job Safety Analysis (JSA) meetings before each drilling shift change and prior to any subcontractor performing any task on the location. All equipment should be inspected daily and repaired or replaced as required.
e. Drilling operations commence.
f. Have mud logger monitoring returns. All drill cuttings and waste hauled to specified waste facility.
g. After drilling the surface hole and setting and cementing the casing; if hydrogen sulfide (H_2S) levels are detected greater than 10ppm, implement H_2S Plan by ceasing operations, shut in well, employ H_2S safety trailer and personnel safety devices, install flare line, etc. – refer to plan.
h. Proper secondary containment needs to be in place. Spills need to be cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify Oil Conservation Division (OCD) within 24 hours. Remediation started as soon as possible if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
i. Sundry forms need to be completed and filed as required by OCD.

3. **Proposed Casing Program:** Casing designed as follows:

STRING	HOLE SZ	DEPTH	CSG SZ	COND	WT/GRD	CLLPS/BRS (*Minimum Safety Factors*)	TNSN
Surface	26”	0-1,405’	20”	n/a	106.5# J-55	1.125/1.1	1.8
Intermediate1	18-1/2”	0-3,365’	16”	New	75# J-55	1.125/1.1	1.8
Intermediate 2	14-3/4”	0-5,450’	13-3/8”	New	61# J-55	1.125	1.8
Intermediate 3	12-1/4”	0-11,530’	9-5/8”	New	40# HCL-80	1.125/1.1	1.8
Liner	8-1/2”	11,330’-14,935’	7-5/8”	New	39# P-110	1.125	1.8
Tubing	n/a	0-11,330’	7’’	New	26# HCP-110	1.125/1.1	1.8
Tubing	n/a	11,330’-14,890’	5-1/2”	New	17# HCL-80	1.125/1.1	1.8

Notes:

✓ A deviation survey will be conducted and submitted with the Well Completion Report (Form C-105)
✓ While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.
✓ Based on well completions and geophysical logs on adjacent wells, 7-5/8” casing shoe is expected to be set at 14,935’. Similarly, total depth will be approximately 16,225’ as determined by open hole geophysical logging and after suitable porosity and low resistivity values have been identified. Maximum open hole interval is anticipated to be from 14,935’ to 16,225’, but may change based upon actual wellbore determinations. A sundry notice will document such events as a C-105 well completion report filed within 60 days

4. **Proposed Cementing Plans:**

Surface Casing: Cemented with approximately 961 sacks of Class C cement with 25% excess and circulated to the surface.

1st Intermediate Casing: Cement with approximately 809 sacks of Class C cement with 25% excess back to the surface.

2nd Intermediate Casing: Cement with approximately 884 sacks of Class C cement with 25% excess back to the surface.

3rd internediate Casing: Cement with approximately 1,990 sacks of Class C cement with 25% excess with two DV tools and cement back to surface inside the 13-3/8" surface casing string. Cement top to be confirmed by cement bond logging after cement has cured to appropriate compressive strength.

Liner: Cement from 14,935' back to 11,330' with 211 sacks of Class C with top of cement approximately 200' up inside the 9-5/8" production casing.

5. **Pressure Control:** All Blowout Preventers (BOP) and related equipment will comply with well control requirements as described OCD Rules and Regulations and API RP 53, Section 17. The BOP will be either a Hydril, Cameron or equivalent. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5,000 psig. The maximum surface working pressure is anticipated at 10,000 psig and the test pressure will be 10,000 psig. The OCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness all BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup of J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. BOP testing shall be conducted at:

a. Installation;
b. After equipment or configuration changes;
c. At 30 days from any previous test, and;
d. Any time operations warrant, such as well conditions.

The BOP specifications to be used during the various phases of the drilling and casing installation are included in the table below:

Casing Size	Annular Preventer	Rams
20"	26-3/4" – 3M, with diverter	None
13-3/8"	21-3/4" – 5M	Pipe & Blind/Shear – 5M
9-5/8"	13-5/8– 10M	Pipe & Blind/Shear – 10M

A diagram showing the representative BOP setup is included as Attachment 1.

6. **Auxiliary Well Control and Monitoring:** Hydraulic remote BOP operation and mudlogging to monitor returns.

Proposed Drilling Plan – Coombes SWD #1

7. **Mud Program and Monitoring:** Mud will be balanced for all operations with adjustment as needed based on actual wellbore conditions and is proposed as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	pH
0-1,405'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,405'-3,315'	Brine Mud	9.2-10.0	28-32	NC	NC	NC	10.0
3,315'-16,225'	FW Gel	9.5-10.0	28-32	NC	NC	NC	10.5
13,500'-1,4378'	XCD Brine	12.5-14.6	45-48	20	10	<5	10.5

Mud and all cuttings monitored with all drill cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H_2S, mud shall be adjusted appropriately by weight and H_2S scavengers.

8. **H_2S Safety:** This well and related facilities are not expected to have H_2S releases. However, there may be H_2S in the area. There are no private residences or public facilities in the area but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H_2S levels greater than 10ppm are detected or suspected, the H_2S Contingency Plan will be implemented at the appropriate level.

H_2S Safety – There is a low risk of H_2S in this area. The operator will comply with the provisions of New Mexico Administrative Code (NMAC) 19.15.11 .

a. **Monitoring –** all personnel will wear monitoring devices.
b. **Warning Sign –** a highly visible H_2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
c. **Wind Detection –** two (2) wind direction socks will be placed on location.
d. **Communications –** will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
e. **Alarms –** will be located at the rig floor, circulating pump/reverse unit area and the flare line and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.
f. **Mud program** – If H_2S levels require, proper mud weight, safe drilling practices and H_2S scavengers will minimize potential hazards.
g. **Metallurgy –** all tubulars, pressure control equipment, flowlines, valves, manifolds and related equipment will be rated for H_2S service if required.

The Permian TDS, LLC H_2S Contingency Plan will be implemented if levels greater than 10ppm H_2S are detected.

9. **Geophysical Logging and Testing:** Permian TDS, LLC expects to run:

   a. Geophysical logging through the proposed injection interval will ensure the target interval remains within the Devonian and Silurian formations. Mud logging will be conducted from beneath the surface casing to total depth.
   b. An open hole gamma ray, SP, compensated density- neutron and dual resistivity log suite will be run from total depth to approximately 14,900'.
   c. A cement bond log with gamma ray and collar locator will be run (Radial, CET or equivalent) on the production casing.
   d. No cores or drill stem tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

10. **Potential Hazards:** H2S is a potential hazard. No abnormal pressure or temperatures are anticipated, but drilling operations will be prepared in the event that those conditions occur.

    No loss of circulation is expected to occur with the exception of drilling into the target disposal zone. All onsite personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom-hole pressure is 7,000 psig and the maximum anticipated bottom-hole temperature is 210°F.

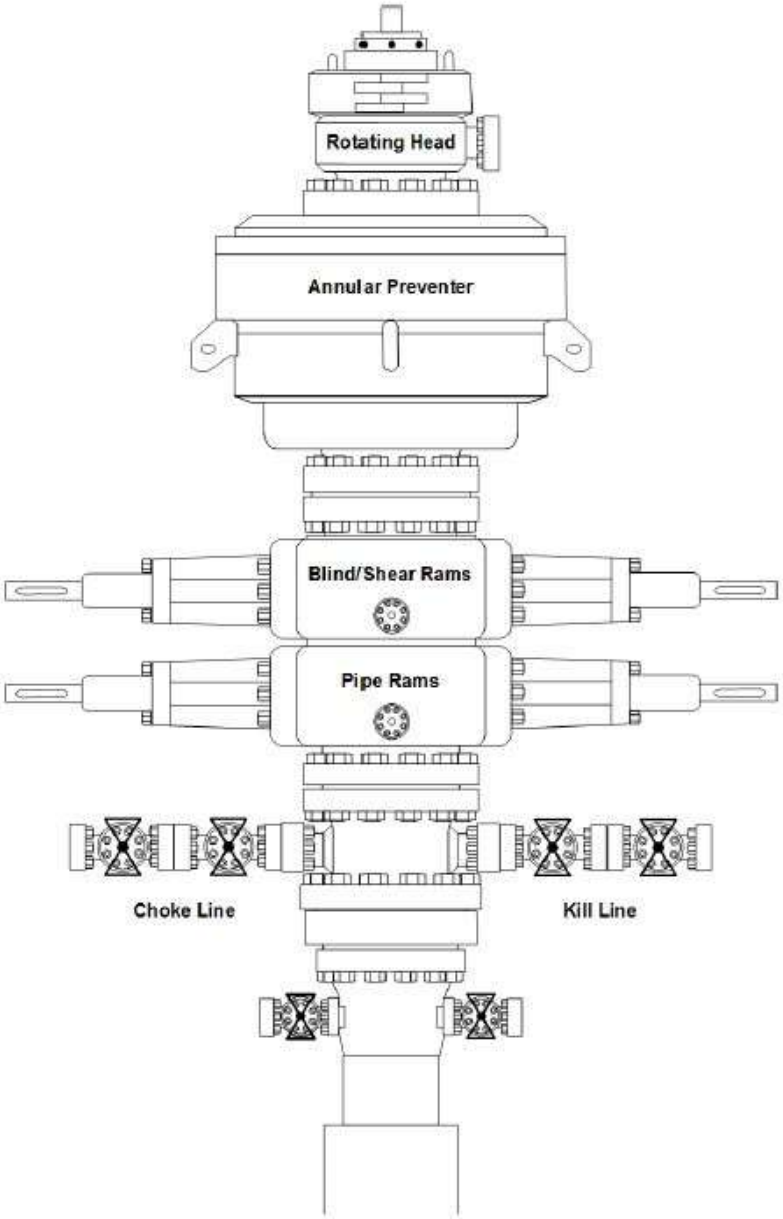
11. **Waste Disposal Management:** All drill cuttings, fluids, and other solid wastes associated with drilling and completion operations will be transported to a solid waste facility and commercial Class IID injection operation that has been approved and permitted by the Environmental Bureau of the OCD.

12. **Anticipated Drilling Commencement Date:** Upon approval of the permit for saltwater disposal (SWD), operations would begin within 30 days based on rig availability. Drilling and completion of the well will take approximately two to three weeks. Installation of the surface facility such as the secondary containment and tank battery, plumbing, injection pump(s), and other treatment and filtering associated equipment would be occurring after the well is completed. In any event, it is not expected for the construction of the surface facility of the project to last more than 90 days, pending on availability of subcontractors and equipment lead times.

13. **Completion for Salt Water Disposal:** Subsequent to SWD permit issuance from OCD and prior to commencing any work, a Notice of Intent (NOI) sundry will be submitted to complete the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure testing per BLM and OCD test procedures (including appropriate OCD notification).The tubing and packer will be set at a depth of approximately 14,890 feet and the casing/tubing annulus will be filled with freshwater and corrosion inhibitor and pressure tested to the required test pressure using the standard annulus pressure test. Anticipated daily maximum volume is 30,000 barrels of water per day (bwpd) and average of 25,000 bwpd at a maximum surface injection pressure of 2,987 psig (0.2 psi/ft to the top of the injection interval). If satisfactory disposals rates cannot be achieved at default pressure of 0.2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psig below actual parting pressure achieved during the step-rate testing.

Proposed Drilling Plan – Coombes SWD #1

Attachment 1 – Representative BOP Setup



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

ORDER

GRANTING UIC PERMIT SWD-1996

Permian TDS, LLC ("Applicant") filed an Application for Authorization to Inject (Form C-108) ("Application") with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division ("OCD") to inject produced water at the Applicant's Coombes SWD No. 1 ("Well"), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control ("UIC") well.

2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.

3. No person filed a protest on the Application.

4. The Well will inject produced water into the Devonian-Silurian formation(s).

5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.

6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 4 mile(s) of the Well.

7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.

9. Applicant is in compliance with 19.15.5.9 NMAC.

10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.

2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.

3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD-1996 for Well Coombes SWD No. 1.

ADRIENNE SANDOVAL
OCD DIRECTOR

Date: 12/05/2022

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC
OGRID No.: 306958

Well name: Coombes SWD No. 1

Surface location: 1630 feet FSL 200 feet FEL Section 22, Township 20 South, Range 33 East, NMPM, Lea County, New Mexico (Lat: 32.5558628, Long: -103.6431607 NAD83)

Bottom hole location (if different): NA

Type of completion: Open Hole

Type of injection: Commercial

Injection fluid: Class II UIC (Produced Water)

Injection interval: 14,935-16,225 feet

Injection interval thickness (feet): 1,350 feet

Confining layer(s): Woodford (Upper) Montoya (lower)

Prohibited injection interval(s): Any formation above or below the permitted injection interval including lost circulation intervals.

Liner, tubing, and packer set: Injection shall occur through 5.5-inch (OD) or smaller tubing placed within the 7.625-inch liner (with a weight of 39 pounds per foot) and 7-inch (OD) or smaller tubing placed in the 9.625-inch intermediate casing above the 7.625-inch liner and packer set within 100 ft from the top of the injection interval.

Maximum daily injection rate: 30,000 Barrels per day.

Maximum surface injection pressure: 2,987 psi

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, ("Act") and its implementing regulations, 19.15.1 *et seq.* NMAC, ("Rules") and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division ("OCD") issues this Permit to Permian TDS, LLC., ("Permittee") to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A ("Well"). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the "operator" of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water ("USDW") if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill ("APD") pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

a. Inspect the Well and associated facilities;

b. Have access to and copy any record required by this Permit;

c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and

d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site,

that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. Monthly Reports. Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

i. The Permit contains a material mistake;

ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;

iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;

iv. The Well's operation may affect the water quality of fresh water;

v. Injected fluid is escaping from the approved injection interval;

vi. Injection may be caused or contributed to seismic activity: or

vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications**. OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

i. Non-substantive changes such as correction of typographical errors;

ii. Requirements for more frequent monitoring or reporting;

iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;

iv. Amendments to the plugging and abandonment plan;

v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;

vi. Corrections of the actual injection interval if within the approved formation; or

vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

The operator shall circulate to surface the cement for the surface and intermediate casings.

III. ATTACHMENT

Well Completion Diagram as Provided in the Application

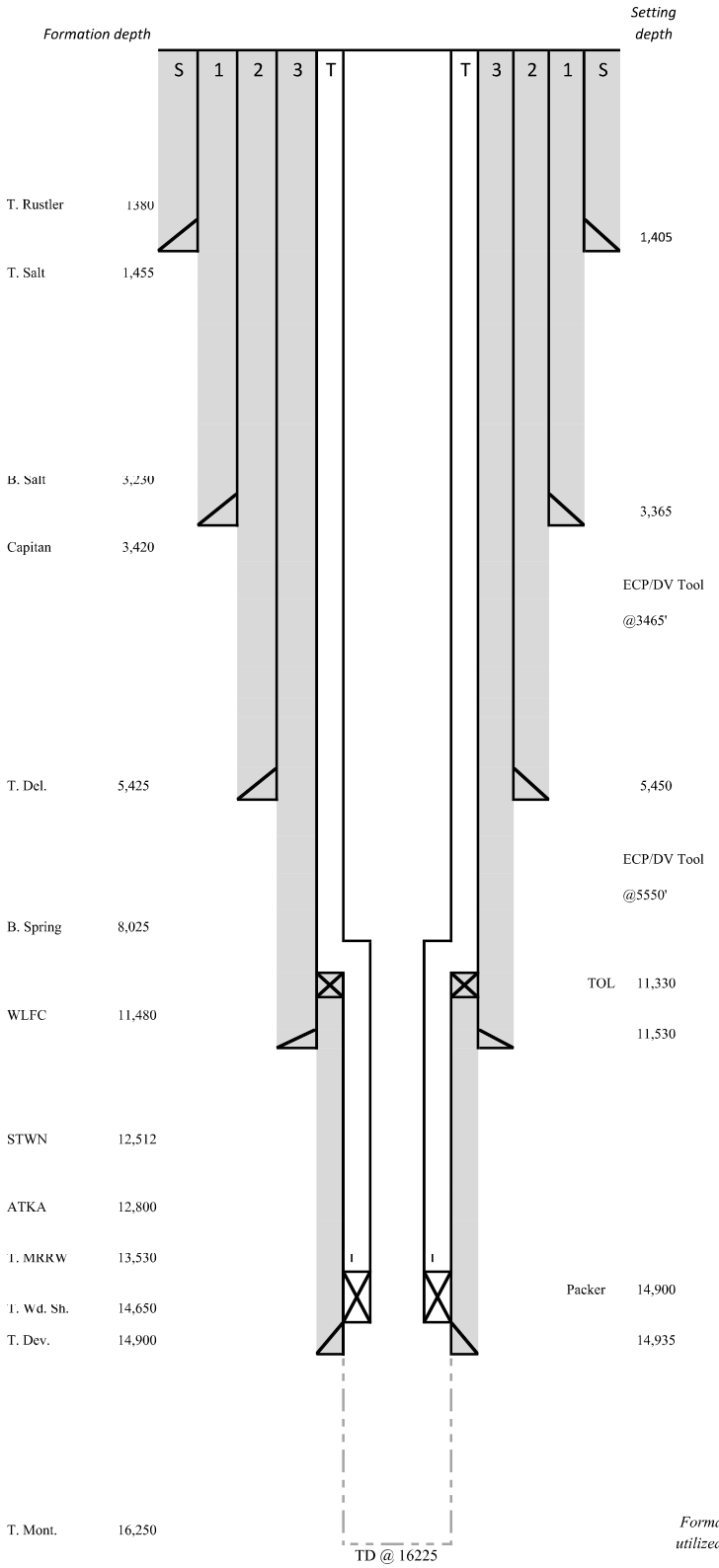
INJECTION WELL DATA SHEET

OPERATOR: **Permian TDS, LLC**

WELL NAME & NUMBER: **Coombes SWD #1**

WELL LOCATION					
1630' FSL & 200' FEL	**I**	**22**	**20S**	**33E**
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



Not to Scale

WELL CONSTRUCTION DATA

Surface Casing

Hole Size **26** in. Casing Size: **20** in.
Setting Depth: **Surface** ft. to **1405** ft.
Cemented with: **961** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

1st Intermediate Casing

Hole Size **18.5** in. Casing Size: **16** in.
Setting Depth: **Surface** ft. to **3,365** ft.
Cemented with: **809** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

2nd Intermediate Casing

Hole Size **14.75** in. Casing Size: **13.375** in.
Setting Depth: **Surface** ft. to **5,450** ft.
Cemented with: **884** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

3rd Intermediate Casing

Hole Size **12.25** in. Casing Size: **9.625** in.
Setting Depth: **Surface** ft. to **11,530** ft.
Cemented with: **1990** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

Liner

Hole Size **8.5** in. Casing Size: **7.625** in.
Setting Depth: **11,330** ft. to **14,935** ft.
Cemented with: **211** sx. or _____ ft³
Top of Cement: **11330** TOL Method Determined: **CBL**

Open Hole Injection Interval

14,935 ft. to **16,225** ft

Formation tops have been extrapulated from control wells in the vicinity. During drilling activites, mud and other logs will be utilized to confirm depths and thicknesses of geologic formations. Should logging data indicate adjustments are required to the casing and cement program, applicable Sundry Notices will be filed with the NMOCD.

INJECTION WELL DATA SHEET

Tubing Size: **7" tapered to 5.5"** Lining Matrial: **Fiberglass**

Type of Packer: **5.5" Perma-Pak or Equivalent (Inconel)**

Packer Setting Depth: **14,900** Ft.

Other Type of Tubing/Casing Seal (if applicable): **Not Applicable**

Additional Data

1. Is this a new well drilled for injection? **XXX** Yes _____ No

   If no, for what purpose was the well oringally drilled? **N/A**

2. Name of the Injection Formation: **Devonian-Silurian**

3. Name of Field or Pool (if applicable): **SWD; Devonian-Silurian**

4. Has the well ever been perforated in any other zones (s)" List all such perforated intervals and give plugging detail, i.e. sacks of cent or plugs(s) used. **N/A**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

name	*depth*
T. Rustler	**1,380**
T. Salt	**1,455**
B. Salt	**3,230**
T. Yates	**3,315**
T. Capitan	**3,420**
T. Delaware	**5,425**
T. Bone Spring	**8,025**
T. Wolfcamp	**11,480**
T. Strawn	**12,512**
T. Atoka	**12,800**
T. Morrow	**13,530**
T. Woodford	**14,650**
T. Devonian	**14,900**
T. Montoya	**16,250**

There are no known oil and gas zones underlying the proposed injection interval

III. Well Data

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1)

General Well Information	
Operator	Permian TDS, LLC
Lease Name & Well No.	Coombes SWD #1
Location	1630' FSL & 200' FEL, UL I, Sec. 22, T20S, R33E

(2)

Casing Information							
String	Size	Weight/Grade	Setting Depth	Sacks of Cement	Hole Size	Estimated Top of Cement	Method of Determination
Surface	20"	106.5# J-55 STC	1,405'	961	26"	Surface	Circulation
Intermediate 1	16"	75# J-55 STC	3,365'	809	18.5	Surface	Circulation
Intermediate 2	13.375"	61# J-55 FJ	5,450'	884	14.75"	Surface	Circulation
Intermediate 3	9.625"	40# HCL-80 BTC	11,530'	1,990	12.25"	Surface	Circulation
Liner	7.625"	39# P-110 FJ	11,330-14935'	211	8.5"	11,330 (TOL)	Volumetric
Open Hole	NA	NA	14,935-16,225	NA	6.5"	NA	CBL

(3)

Description of Tubing			
Size	Weight/Grade	Lining Material	Setting Depth
7"	26# HCP-110 FJ	Fiberglass Lined	11,330'
5.5"	17# HCL-80 FJ	Fiberglass Lined	14,890'

(4)

Packer Information	
Type	Setting Depth
5.5" Perma-Pak or Equivalent (Inconel)	14,900'

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

	Injection Information	
(1)	Name of Injection Formation:	Devonian -Silurian, Montoya
(2)	Injection Interval:	14,935' to 16,225'
	Perforated or Open-Hole:	Open Hole
(3)	Purpose of Well:	New Drill for Salt Water Disposal
(4)	Other Perforated Intervals:	None

(5)

Estimated Depth of Various Formations Including Oil and Gas Zones (Ft. bgs)	
T. Rustler	1,380
T. Salt	1,455
B. Salt	3,230
Yates	3,315
T. Capitan	3,420
T. Delaware	5,425
T. Bone Spring	8,025
T. Wolfcamp	11,480
T. Strawn	12,512
T. Atoka	12,800
T. Morrow	13,530
T. Woodford Shale	14,650
T. Devonian	14,900
T. Montoya	16,250

There are no known oil and gas zones beneath the proposed injection zone.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions

Permit 347611

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
PERMIAN TDS, LLC [306958] P.O. Box 788 Lovington, NM 88260	30-025-51904
	Well: COOMBES SWD #001

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require deviation survey with C-105
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
pkautz	R-111p area cement must circulate on all strings.
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A RCBL MUST BE RUN ON THAT STRING OF CASING.
pkautz	IN ADDITION TO PRVIOUS COA, IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A CBL MUST BE RUN ON THAT STRING OF CASING.

State of New Mexico
Energy, Minerals and Natural Resources Department

August 22, 2023

BUREAU OF LAND MANAGEMENT
ATT: James S. Rutley
620 E Greene Street
Carlsbad, NM 88220

STATE LAND OFFICE
ATT: Paige Czoski
PO BOX 1148
Santa Fe, NM 87505

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR: PERMIAN TDS, LLC

LEASE NAME: COOMBES SWD #001

PROPOSED LOCATION: U/L I Sec 22 T20S R33E 1630 FSL 200 FEL

Lat. 32.5558628 Long. -103.6431607 NAD83

PROPOSED DEPTH: 16225' MD 16225' TVD

Gentleman:

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuant to the provisions of Oil Conservation Division Order R – 111 - P, please advise this office whether the location is within an established Life-of-Mine-Reserve that are filed with and approved by your office. If not, please advise whether it is within the buffer zone established by the order.

Thank you for your assistance. Please Return as soon as possible.

Very truly yours,

OIL CONSERVATION DIVISION

Paul Kautz

Hobbs District Geologist, District I

RESONSE:

The above referenced location is in LMR (2023 year) ----------Yes_____ No ✓

The above referenced location is within the Buffer Zone----------Yes_____ No ✓

Signed _____

Printed Signature JAMES RUTLEY

Representing BLM · CFO · SOLIDS

District I
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811 S. First St., Artesia, NM 88210
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District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Permian TDS, LLC P.O. Box 788 Lovington, NM 88260	306958
	3. API Number

4. Property Code	5. Property Name	6. Well No.
	Coombes SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
SWD; Devonian - Silurian	97869

UIC Permit: SWD-1996

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	S	R	Fee	3,612'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	16,225'	Devonian - Silurian	TBD	Upon Approval

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
413.55' (USGS Site 323335103370601)	1.38-miles (CP-00789 POD1)	2.93-mile (Northwest)

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	106.5 lb/ft	1,405'	961	Surface
Intermediate 1	18.5"	16"	75 lb/ft	3,365'	809	Surface
Intermediate 2	14.75"	13.375"	61 lb/ft	5,450'	884	Surface
Intermediate 3	12.25"	9.625"	40 lb/ft	11,530'	1,990	Surface
Liner	8.50"	7.625"	39 lb/ft	11,330' - 14,935'	211	11,330' (TOL)
Tubing	N/A	7"	26 lb/ft	11,330'	N/A	N/A
Tubing	N/A	5.5"	17 lb/ft	14,890'	N/A	N/A

Casing/Cement Program: Additional Comments

Open Hole completion from 14,935' - 16,225' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Hydril, Cameron or equivalent

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Oliver Seekins

Printed name: Oliver Seekins

Title: Consultant

E-mail Address: oseekins@all-llc.com

Date: 8.14.23 Phone: 918-382-7581

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date: Expiration Date:

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	97869	SWD; Devonian - Silurian

4 Property Code	5 Property Name	6 Well Number
	COOMBES SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
306958	PERMIAN TDS, LLC.	3612'

10 Surface Location

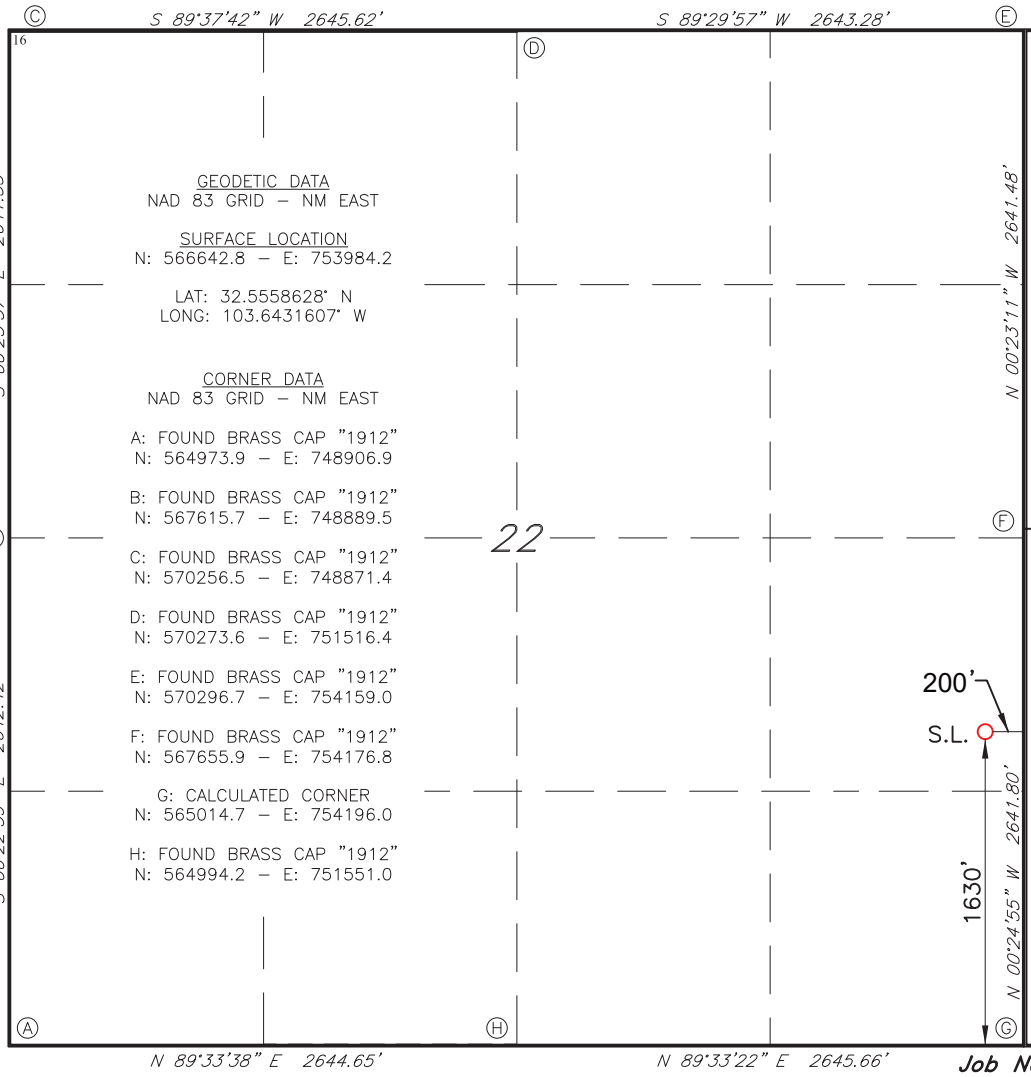
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
			SWD - 1996

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nathan Alleman 8/15/2023
Signature Date

Nathan Alleman
Printed Name

nate.alleman@aceadvisors.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

1-14-19
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No.: LS19010055

Permian TDS, LLC
Coombes SWD #1
1,630' FSL & 200' FEL
Section 22, Twp 20S, Rng 33E
Lea County, New Mexico

Proposed Drilling Plan for New SWD

1. **Geologic Information:** Devonian-Silurian geologic formations

The Devonian and Silurian Fusselman formations consist of carbonates rocks including dolomites, siliceous shallow water limestones, and deep-water chert intervals. Several thick sections of porous and permeable dolomites are present within these formations in the area. Geologic information and depths of formation tops were obtained from surrounding deep wells within the area of interest. Open hole injection interval is estimated to be from 14,935' to 16,225'. The top of the Rustler Formation is at approximately 1,380 feet plus 25 feet equals 1,405 feet to set bottom of the surface casing to protect the deepest underground sources of drinking water (USDWs).

Estimated Formation Top Depths:

Rustler - Top	1,380'
Salado - Base	3,230'
Yates	3,315'
Capitan Reef	3,420'
Delaware	5,425'
Bone Spring	8,025'
Wolfcamp	11,480'
Strawn	12,512'
Atoka	12,800'
Morrow	13,530'
Woodford	14,650'
Devonian	14,900'
Montoya	16,250'
Total Depth	16,225'

2. **Proposed Drilling Plan:**

a. Move in equipment, excavate cellar and install tinhorn, and then drill conductor hole and set and cement in conductor casing.
b. Mobilize drilling rig and rig up drilling rig and associated equipment onsite. Set up H_2S wind direction indicators and monitors; brief all personnel on Emergency Evacuation Routes and Site Health and Safety Plan.
c. Everyone onsite will have stop work authority.
d. Perform Job Safety Analysis (JSA) meetings before each drilling shift change and prior to any subcontractor performing any task on the location. All equipment should be inspected daily and repaired or replaced as required.
e. Drilling operations commence.
f. Have mud logger monitoring returns. All drill cuttings and waste hauled to specified waste facility.
g. After drilling the surface hole and setting and cementing the casing; if hydrogen sulfide (H_2S) levels are detected greater than 10ppm, implement H_2S Plan by ceasing operations, shut in well, employ H_2S safety trailer and personnel safety devices, install flare line, etc. – refer to plan.
h. Proper secondary containment needs to be in place. Spills need to be cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify Oil Conservation Division (OCD) within 24 hours. Remediation started as soon as possible if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
i. Sundry forms need to be completed and filed as required by OCD.

3. **Proposed Casing Program:** Casing designed as follows:

STRING	HOLE SZ	DEPTH	CSG SZ	COND	WT/GRD	CLLPS/BRS (*Minimum Safety Factors*)	TNSN
Surface	26”	0-1,405’	20”	n/a	106.5# J-55	1.125/1.1	1.8
Intermediate1	18-1/2”	0-3,365’	16”	New	75# J-55	1.125/1.1	1.8
Intermediate 2	14-3/4”	0-5,450’	13-3/8”	New	61# J-55	1.125	1.8
Intermediate 3	12-1/4”	0-11,530’	9-5/8”	New	40# HCL-80	1.125/1.1	1.8
Liner	8-1/2”	11,330’-14,935’	7-5/8”	New	39# P-110	1.125	1.8
Tubing	n/a	0-11,330’	7’’	New	26# HCP-110	1.125/1.1	1.8
Tubing	n/a	11,330’-14,890’	5-1/2”	New	17# HCL-80	1.125/1.1	1.8

Notes:

- ✓ A deviation survey will be conducted and submitted with the Well Completion Report (Form C-105)
- ✓ While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.
- ✓ Based on well completions and geophysical logs on adjacent wells, 7-5/8” casing shoe is expected to be set at 14,935’. Similarly, total depth will be approximately 16,225’ as determined by open hole geophysical logging and after suitable porosity and low resistivity values have been identified. Maximum open hole interval is anticipated to be from 14,935’ to 16,225’, but may change based upon actual wellbore determinations. A sundry notice will document such events as a C-105 well completion report filed within 60 days

4. **Proposed Cementing Plans:**

Surface Casing: Cemented with approximately 961 sacks of Class C cement with 25% excess and circulated to the surface.

1st Intermediate Casing: Cement with approximately 809 sacks of Class C cement with 25% excess back to the surface.

2nd Intermediate Casing: Cement with approximately 884 sacks of Class C cement with 25% excess back to the surface.

3rd internediate Casing: Cement with approximately 1,990 sacks of Class C cement with 25% excess with two DV tools and cement back to surface inside the 13-3/8" surface casing string. Cement top to be confirmed by cement bond logging after cement has cured to appropriate compressive strength.

Liner: Cement from 14,935' back to 11,330' with 211 sacks of Class C with top of cement approximately 200' up inside the 9-5/8" production casing.

5. **Pressure Control:** All Blowout Preventers (BOP) and related equipment will comply with well control requirements as described OCD Rules and Regulations and API RP 53, Section 17. The BOP will be either a Hydril, Cameron or equivalent. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5,000 psig. The maximum surface working pressure is anticipated at 10,000 psig and the test pressure will be 10,000 psig. The OCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness all BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup of J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. BOP testing shall be conducted at:

a. Installation;
b. After equipment or configuration changes;
c. At 30 days from any previous test, and;
d. Any time operations warrant, such as well conditions.

The BOP specifications to be used during the various phases of the drilling and casing installation are included in the table below:

Casing Size	Annular Preventer	Rams
20"	26-3/4" – 3M, with diverter	None
13-3/8"	21-3/4" – 5M	Pipe & Blind/Shear – 5M
9-5/8"	13-5/8– 10M	Pipe & Blind/Shear – 10M

A diagram showing the representative BOP setup is included as Attachment 1.

6. **Auxiliary Well Control and Monitoring:** Hydraulic remote BOP operation and mudlogging to monitor returns.

7. **Mud Program and Monitoring:** Mud will be balanced for all operations with adjustment as needed based on actual wellbore conditions and is proposed as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	pH
0-1,405'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,405'-3,315'	Brine Mud	9.2-10.0	28-32	NC	NC	NC	10.0
3,315'-16,225'	FW Gel	9.5-10.0	28-32	NC	NC	NC	10.5
13,500'-1,4378'	XCD Brine	12.5-14.6	45-48	20	10	<5	10.5

Mud and all cuttings monitored with all drill cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H_2S, mud shall be adjusted appropriately by weight and H_2S scavengers.

8. **H_2S Safety:** This well and related facilities are not expected to have H_2S releases. However, there may be H_2S in the area. There are no private residences or public facilities in the area but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H_2S levels greater than 10ppm are detected or suspected, the H_2S Contingency Plan will be implemented at the appropriate level.

H_2S Safety – There is a low risk of H_2S in this area. The operator will comply with the provisions of New Mexico Administrative Code (NMAC) 19.15.11 .

a. **Monitoring** – all personnel will wear monitoring devices.
b. **Warning Sign** – a highly visible H_2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
c. **Wind Detection** – two (2) wind direction socks will be placed on location.
d. **Communications** – will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
e. **Alarms** – will be located at the rig floor, circulating pump/reverse unit area and the flare line and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.
f. **Mud program** – If H_2S levels require, proper mud weight, safe drilling practices and H_2S scavengers will minimize potential hazards.
g. **Metallurgy** – all tubulars, pressure control equipment, flowlines, valves, manifolds and related equipment will be rated for H_2S service if required.

The Permian TDS, LLC H_2S Contingency Plan will be implemented if levels greater than 10ppm H_2S are detected.

9. **Geophysical Logging and Testing:** Permian TDS, LLC expects to run:

   a. Geophysical logging through the proposed injection interval will ensure the target interval remains within the Devonian and Silurian formations. Mud logging will be conducted from beneath the surface casing to total depth.
   b. An open hole gamma ray, SP, compensated density- neutron and dual resistivity log suite will be run from total depth to approximately 14,900'.
   c. A cement bond log with gamma ray and collar locator will be run (Radial, CET or equivalent) on the production casing.
   d. No cores or drill stem tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

10. **Potential Hazards:** H2S is a potential hazard. No abnormal pressure or temperatures are anticipated, but drilling operations will be prepared in the event that those conditions occur.

    No loss of circulation is expected to occur with the exception of drilling into the target disposal zone. All onsite personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom-hole pressure is 7,000 psig and the maximum anticipated bottom-hole temperature is 210°F.

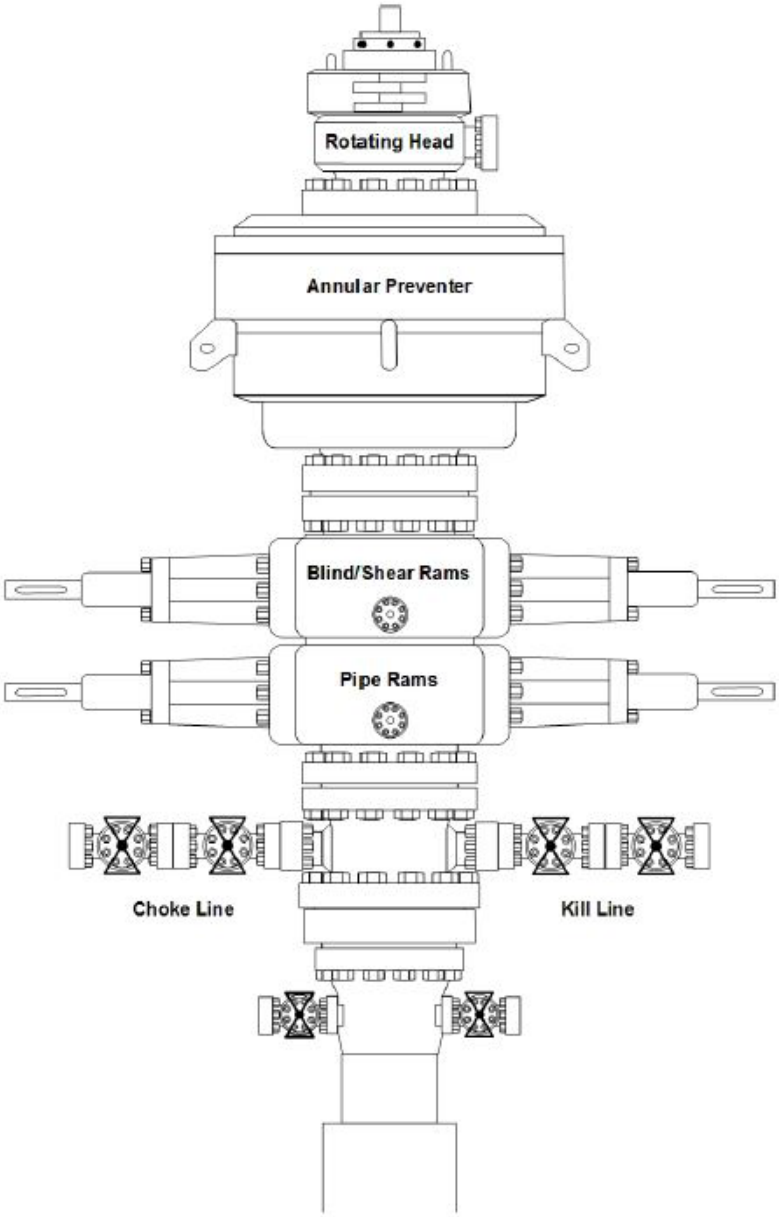
11. **Waste Disposal Management:** All drill cuttings, fluids, and other solid wastes associated with drilling and completion operations will be transported to a solid waste facility and commercial Class IID injection operation that has been approved and permitted by the Environmental Bureau of the OCD.

12. **Anticipated Drilling Commencement Date:** Upon approval of the permit for saltwater disposal (SWD), operations would begin within 30 days based on rig availability. Drilling and completion of the well will take approximately two to three weeks. Installation of the surface facility such as the secondary containment and tank battery, plumbing, injection pump(s), and other treatment and filtering associated equipment would be occurring after the well is completed. In any event, it is not expected for the construction of the surface facility of the project to last more than 90 days, pending on availability of subcontractors and equipment lead times.

13. **Completion for Salt Water Disposal:** Subsequent to SWD permit issuance from OCD and prior to commencing any work, a Notice of Intent (NOI) sundry will be submitted to complete the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure testing per BLM and OCD test procedures (including appropriate OCD notification).The tubing and packer will be set at a depth of approximately 14,890 feet and the casing/tubing annulus will be filled with freshwater and corrosion inhibitor and pressure tested to the required test pressure using the standard annulus pressure test. Anticipated daily maximum volume is 30,000 barrels of water per day (bwpd) and average of 25,000 bwpd at a maximum surface injection pressure of 2,987 psig (0.2 psi/ft to the top of the injection interval). If satisfactory disposals rates cannot be achieved at default pressure of 0.2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psig below actual parting pressure achieved during the step-rate testing.

Proposed Drilling Plan – Coombes SWD #1

Attachment 1 – Representative BOP Setup



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

ORDER

GRANTING UIC PERMIT SWD-1996

Permian TDS, LLC ("Applicant") filed an Application for Authorization to Inject (Form C-108) ("Application") with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division ("OCD") to inject produced water at the Applicant's Coombes SWD No. 1 ("Well"), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control ("UIC") well.

2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.

3. No person filed a protest on the Application.

4. The Well will inject produced water into the Devonian-Silurian formation(s).

5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.

6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 4 mile(s) of the Well.

7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.

9. Applicant is in compliance with 19.15.5.9 NMAC.

10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.

2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.

3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD-1996 for Well Coombes SWD No. 1.

ADRIENNE SANDOVAL
OCD DIRECTOR

Date: 12/05/2022

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC
OGRID No.: 306958

Well name: Coombes SWD No. 1

Surface location: 1630 feet FSL 200 feet FEL Section 22, Township 20 South, Range 33 East, NMPM, Lea County, New Mexico (Lat: 32.5558628, Long: -103.6431607 NAD83)

Bottom hole location (if different): NA

Type of completion: Open Hole

Type of injection: Commercial

Injection fluid: Class II UIC (Produced Water)

Injection interval: 14,935-16,225 feet

Injection interval thickness (feet): 1,350 feet

Confining layer(s): Woodford (Upper) Montoya (lower)

Prohibited injection interval(s): Any formation above or below the permitted injection interval including lost circulation intervals.

Liner, tubing, and packer set: Injection shall occur through 5.5-inch (OD) or smaller tubing placed within the 7.625-inch liner (with a weight of 39 pounds per foot) and 7-inch (OD) or smaller tubing placed in the 9.625-inch intermediate casing above the 7.625-inch liner and packer set within 100 ft from the top of the injection interval.

Maximum daily injection rate: 30,000 Barrels per day.

Maximum surface injection pressure: 2,987 psi

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, ("Act") and its implementing regulations, 19.15.1 *et seq.* NMAC, ("Rules") and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division ("OCD") issues this Permit to Permian TDS, LLC., ("Permittee") to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A ("Well"). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the "operator" of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water ("USDW") if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill ("APD") pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

a. Inspect the Well and associated facilities;

b. Have access to and copy any record required by this Permit;

c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and

d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site,

that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. Monthly Reports. Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

i. The Permit contains a material mistake;

ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;

iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;

iv. The Well's operation may affect the water quality of fresh water;

v. Injected fluid is escaping from the approved injection interval;

vi. Injection may be caused or contributed to seismic activity: or

vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications**. OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

i. Non-substantive changes such as correction of typographical errors;

ii. Requirements for more frequent monitoring or reporting;

iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;

iv. Amendments to the plugging and abandonment plan;

v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;

vi. Corrections of the actual injection interval if within the approved formation; or

vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

The operator shall circulate to surface the cement for the surface and intermediate casings.

III. ATTACHMENT

Well Completion Diagram as Provided in the Application

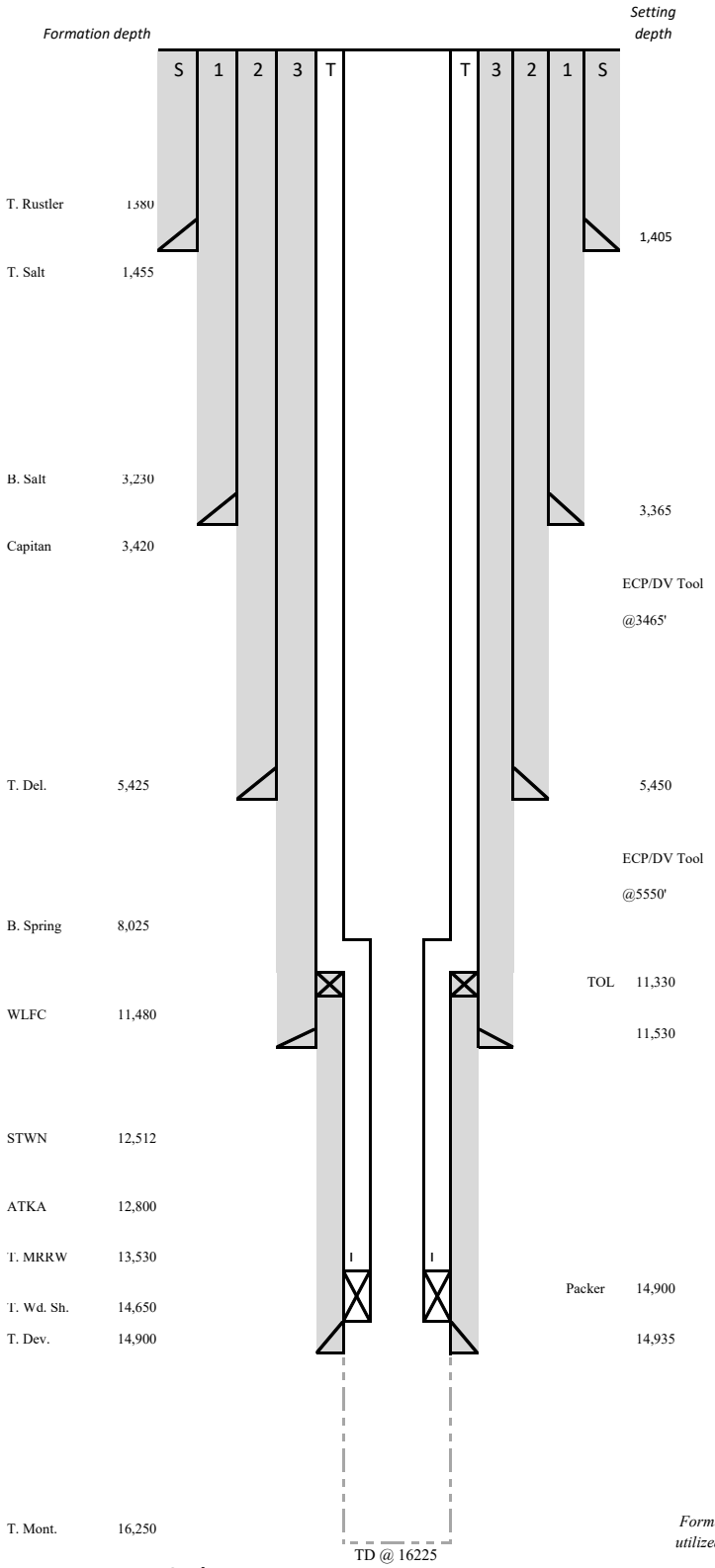
INJECTION WELL DATA SHEET

OPERATOR: **Permian TDS, LLC**

WELL NAME & NUMBER: **Coombes SWD #1**

WELL LOCATION					
1630' FSL & 200' FEL	**I**	**22**	**20S**	**33E**
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



Not to Scale

WELL CONSTRUCTION DATA

Surface Casing

Hole Size **26** in. Casing Size: **20** in.
Setting Depth: **Surface** ft. to **1405** ft.
Cemented with: **961** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

1st Intermediate Casing

Hole Size **18.5** in. Casing Size: **16** in.
Setting Depth: **Surface** ft. to **3,365** ft.
Cemented with: **809** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

2nd Intermediate Casing

Hole Size **14.75** in. Casing Size: **13.375** in.
Setting Depth: **Surface** ft. to **5,450** ft.
Cemented with: **884** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

3rd Intermediate Casing

Hole Size **12.25** in. Casing Size: **9.625** in.
Setting Depth: **Surface** ft. to **11,530** ft.
Cemented with: **1990** sx. or _____ ft³
Top of Cement: **Surface** Method Determined: **Circulation**

Liner

Hole Size **8.5** in. Casing Size: **7.625** in.
Setting Depth: **11,330** ft. to **14,935** ft.
Cemented with: **211** sx. or _____ ft³
Top of Cement: **11330** TOL Method Determined: **CBL**

Open Hole Injection Interval

14,935 ft. to **16,225** ft

Formation tops have been extrapulated from control wells in the vicinity. During drilling activites, mud and other logs will be utilized to confirm depths and thicknesses of geologic formations. Should logging data indicate adjustments are required to the casing and cement program, applicable Sundry Notices will be filed with the NMOCD.

INJECTION WELL DATA SHEET

Tubing Size: **7" tapered to 5.5"** Lining Matrial: **Fiberglass**

Type of Packer: **5.5" Perma-Pak or Equivalent (Inconel)**

Packer Setting Depth: **14,900** Ft.

Other Type of Tubing/Casing Seal (if applicable): **Not Applicable**

Additional Data

1. Is this a new well drilled for injection? **XXX** Yes _____ No

   If no, for what purpose was the well oringally drilled? **N/A**

2. Name of the Injection Formation: **Devonian-Silurian**

3. Name of Field or Pool (if applicable): **SWD; Devonian-Silurian**

4. Has the well ever been perforated in any other zones (s)" List all such perforated intervals and give plugging detail, i.e. sacks of cent or plugs(s) used. **N/A**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

name	*depth*
T. Rustler	**1,380**
T. Salt	**1,455**
B. Salt	**3,230**
T. Yates	**3,315**
T. Capitan	**3,420**
T. Delaware	**5,425**
T. Bone Spring	**8,025**
T. Wolfcamp	**11,480**
T. Strawn	**12,512**
T. Atoka	**12,800**
T. Morrow	**13,530**
T. Woodford	**14,650**
T. Devonian	**14,900**
T. Montoya	**16,250**

There are no known oil and gas zones underlying the proposed injection interval

III. Well Data

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1)

General Well Information	
Operator	Permian TDS, LLC
Lease Name & Well No.	Coombes SWD #1
Location	1630' FSL & 200' FEL, UL I, Sec. 22, T20S, R33E

(2)

Casing Information							
String	Size	Weight/Grade	Setting Depth	Sacks of Cement	Hole Size	Estimated Top of Cement	Method of Determination
Surface	20"	106.5# J-55 STC	1,405'	961	26"	Surface	Circulation
Intermediate 1	16"	75# J-55 STC	3,365'	809	18.5	Surface	Circulation
Intermediate 2	13.375"	61# J-55 FJ	5,450'	884	14.75"	Surface	Circulation
Intermediate 3	9.625"	40# HCL-80 BTC	11,530'	1,990	12.25"	Surface	Circulation
Liner	7.625"	39# P-110 FJ	11,330-14935'	211	8.5"	11,330 (TOL)	Volumetric
Open Hole	NA	NA	14,935-16,225	NA	6.5"	NA	CBL

(3)

Description of Tubing			
Size	Weight/Grade	Lining Material	Setting Depth
7"	26# HCP-110 FJ	Fiberglass Lined	11,330'
5.5"	17# HCL-80 FJ	Fiberglass Lined	14,890'

(4)

Packer Information	
Type	Setting Depth
5.5" Perma-Pak or Equivalent (Inconel)	14,900'

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

	Injection Information	
(1)	Name of Injection Formation:	Devonian -Silurian, Montoya
(2)	Injection Interval:	14,935' to 16,225'
	Perforated or Open-Hole:	Open Hole
(3)	Purpose of Well:	New Drill for Salt Water Disposal
(4)	Other Perforated Intervals:	None

(5)

Estimated Depth of Various Formations Including Oil and Gas Zones (Ft. bgs)	
T. Rustler	1,380
T. Salt	1,455
B. Salt	3,230
Yates	3,315
T. Capitan	3,420
T. Delaware	5,425
T. Bone Spring	8,025
T. Wolfcamp	11,480
T. Strawn	12,512
T. Atoka	12,800
T. Morrow	13,530
T. Woodford Shale	14,650
T. Devonian	14,900
T. Montoya	16,250

There are no known oil and gas zones beneath the proposed injection zone.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
Permian TDS, LLC P.O. Box 788 Lovington, NM 88260	306958
	3. API Number

4. Property Code	5. Property Name	6. Well No.
	Coombes SWD	1

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name	Pool Code
SWD; Devonian - Silurian	97869

UIC Permit: SWD-1996

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
N	S	R	Fee	3,612'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	16,225'	Devonian - Silurian	TBD	Upon Approval

Depth to Ground water	Distance from nearest fresh water well	Distance to nearest surface water
413.55' (USGS Site 323335103370601)	1.38-miles (CP-00789 POD1)	2.93-mile (Northwest)

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	26"	20"	106.5 lb/ft	1,405'	961	Surface
Intermediate 1	18.5"	16"	75 lb/ft	3,365'	809	Surface
Intermediate 2	14.75"	13.375"	61 lb/ft	5,450'	884	Surface
Intermediate 3	12.25"	9.625"	40 lb/ft	11,530'	1,990	Surface
Liner	8.50"	7.625"	39 lb/ft	11,330' - 14,935'	211	11,330' (TOL)
Tubing	N/A	7"	26 lb/ft	11,330'	N/A	N/A
Tubing	N/A	5.5"	17 lb/ft	14,890'	N/A	N/A

Casing/Cement Program: Additional Comments

Open Hole completion from 14,935' - 16,225' (6.5" hole size)

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular, Pipe & Blind / Shear Rams	10,000 psig	10,000 psig	Hydril, Cameron or equivalent

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.
Signature: Oliver Seekins

Printed name: Oliver Seekins

Title: Consultant

E-mail Address: oseekins@all-llc.com

Date: 8.14.23 Phone: 918-382-7581

OIL CONSERVATION DIVISION

Approved By:

Title:

Approved Date: Expiration Date:

Conditions of Approval Attached

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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811 S. First St., Artesia, NM 88210
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Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
	97869	SWD; Devonian - Silurian

4 Property Code	5 Property Name	6 Well Number
	COOMBES SWD	1

7 OGRID NO.	8 Operator Name	9 Elevation
306958	PERMIAN TDS, LLC.	3612'

10 Surface Location

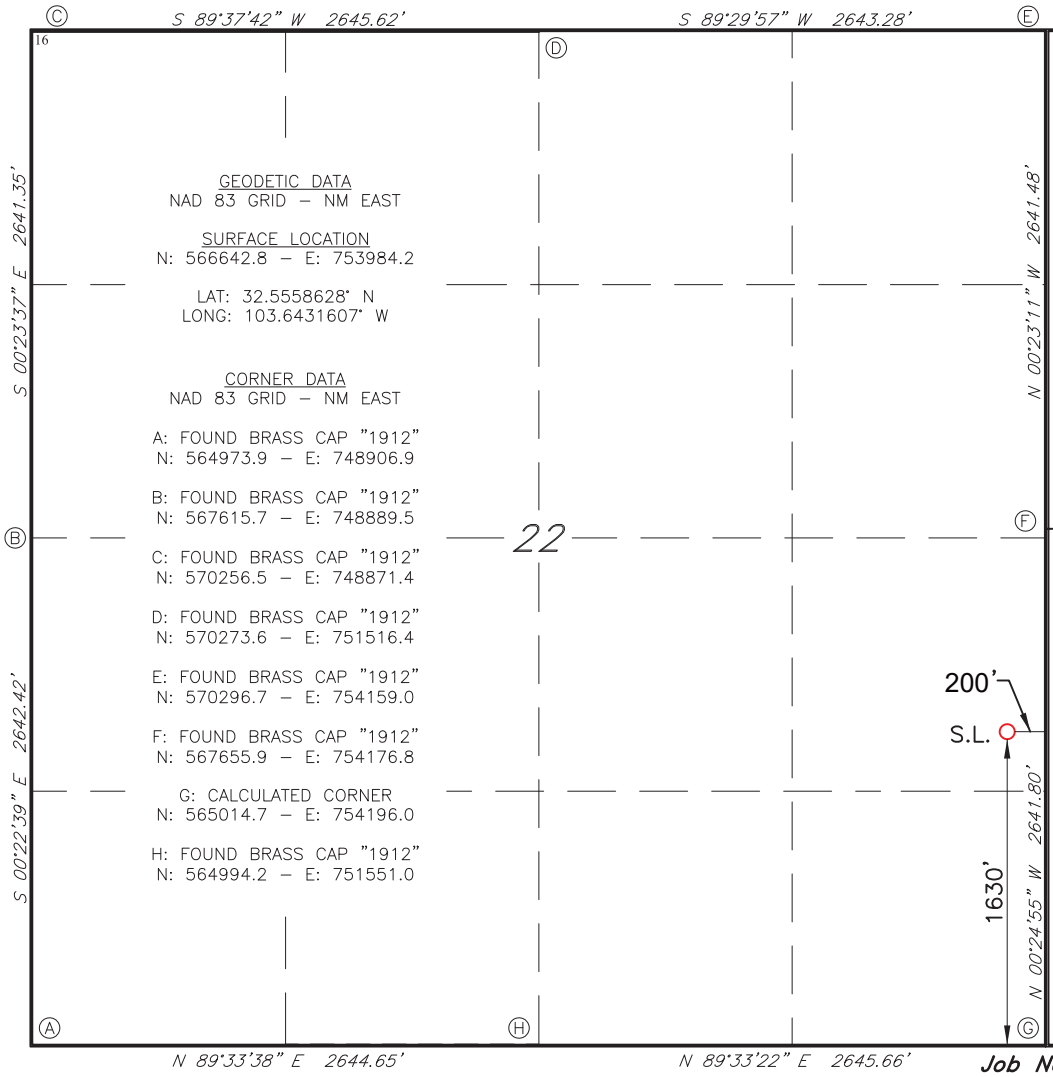
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
I	22	20S	33E		1630	SOUTH	200	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
			SWD - 1996

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Nathan Alleman 8/15/2023
Signature Date

Nathan Alleman
Printed Name

nate.alleman@aceadvisors.com
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

1-14-19
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT NEW MEXICO 19680 PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No.: LS19010055

Permian TDS, LLC
Coombes SWD #1
1,630' FSL & 200' FEL
Section 22, Twp 20S, Rng 33E
Lea County, New Mexico

Proposed Drilling Plan for New SWD

1. **Geologic Information:** Devonian-Silurian geologic formations

The Devonian and Silurian Fusselman formations consist of carbonates rocks including dolomites, siliceous shallow water limestones, and deep-water chert intervals. Several thick sections of porous and permeable dolomites are present within these formations in the area. Geologic information and depths of formation tops were obtained from surrounding deep wells within the area of interest. Open hole injection interval is estimated to be from 14,935' to 16,225'. The top of the Rustler Formation is at approximately 1,380 feet plus 25 feet equals 1,405 feet to set bottom of the surface casing to protect the deepest underground sources of drinking water (USDWs).

Estimated Formation Top Depths:

Rustler - Top	1,380'
Salado - Base	3,230'
Yates	3,315'
Capitan Reef	3,420'
Delaware	5,425'
Bone Spring	8,025'
Wolfcamp	11,480'
Strawn	12,512'
Atoka	12,800'
Morrow	13,530'
Woodford	14,650'
Devonian	14,900'
Montoya	16,250'
Total Depth	16,225'

2. **Proposed Drilling Plan:**

a. Move in equipment, excavate cellar and install tinhorn, and then drill conductor hole and set and cement in conductor casing.
b. Mobilize drilling rig and rig up drilling rig and associated equipment onsite. Set up H_2S wind direction indicators and monitors; brief all personnel on Emergency Evacuation Routes and Site Health and Safety Plan.
c. Everyone onsite will have stop work authority.
d. Perform Job Safety Analysis (JSA) meetings before each drilling shift change and prior to any subcontractor performing any task on the location. All equipment should be inspected daily and repaired or replaced as required.
e. Drilling operations commence.
f. Have mud logger monitoring returns. All drill cuttings and waste hauled to specified waste facility.
g. After drilling the surface hole and setting and cementing the casing; if hydrogen sulfide (H_2S) levels are detected greater than 10ppm, implement H_2S Plan by ceasing operations, shut in well, employ H_2S safety trailer and personnel safety devices, install flare line, etc. – refer to plan.
h. Proper secondary containment needs to be in place. Spills need to be cleaned up immediately. Repair or otherwise correct the situation within 48 hours before resuming operations. Notify Oil Conservation Division (OCD) within 24 hours. Remediation started as soon as possible if required. Operator shall comply with 19.15.29 NMAC and 19.15.30 NMAC, as appropriate.
i. Sundry forms need to be completed and filed as required by OCD.

3. **Proposed Casing Program:** Casing designed as follows:

STRING	HOLE SZ	DEPTH	CSG SZ	COND	WT/GRD	CLLPS/BRS (*Minimum Safety Factors*)	TNSN
Surface	26”	0-1,405’	20”	n/a	106.5# J-55	1.125/1.1	1.8
Intermediate1	18-1/2”	0-3,365’	16”	New	75# J-55	1.125/1.1	1.8
Intermediate 2	14-3/4”	0-5,450’	13-3/8”	New	61# J-55	1.125	1.8
Intermediate 3	12-1/4”	0-11,530’	9-5/8”	New	40# HCL-80	1.125/1.1	1.8
Liner	8-1/2”	11,330’-14,935’	7-5/8”	New	39# P-110	1.125	1.8
Tubing	n/a	0-11,330’	7’’	New	26# HCP-110	1.125/1.1	1.8
Tubing	n/a	11,330’-14,890’	5-1/2”	New	17# HCL-80	1.125/1.1	1.8

Notes:

✓ A deviation survey will be conducted and submitted with the Well Completion Report (Form C-105)
✓ While running all casing strings, the pipe will be kept a minimum of 1/3 full at all times to avoid approaching the collapse pressure of casing.
✓ Based on well completions and geophysical logs on adjacent wells, 7-5/8” casing shoe is expected to be set at 14,935’. Similarly, total depth will be approximately 16,225’ as determined by open hole geophysical logging and after suitable porosity and low resistivity values have been identified. Maximum open hole interval is anticipated to be from 14,935’ to 16,225’, but may change based upon actual wellbore determinations. A sundry notice will document such events as a C-105 well completion report filed within 60 days

4. **Proposed Cementing Plans:**

Surface Casing: Cemented with approximately 961 sacks of Class C cement with 25% excess and circulated to the surface.

1st Intermediate Casing: Cement with approximately 809 sacks of Class C cement with 25% excess back to the surface.

2nd Intermediate Casing: Cement with approximately 884 sacks of Class C cement with 25% excess back to the surface.

3rd internediate Casing: Cement with approximately 1,990 sacks of Class C cement with 25% excess with two DV tools and cement back to surface inside the 13-3/8" surface casing string. Cement top to be confirmed by cement bond logging after cement has cured to appropriate compressive strength.

Liner: Cement from 14,935' back to 11,330' with 211 sacks of Class C with top of cement approximately 200' up inside the 9-5/8" production casing.

5. **Pressure Control:** All Blowout Preventers (BOP) and related equipment will comply with well control requirements as described OCD Rules and Regulations and API RP 53, Section 17. The BOP will be either a Hydril, Cameron or equivalent. Minimum working pressure of the BOP and related equipment required for the drilling shall be 5,000 psig. The maximum surface working pressure is anticipated at 10,000 psig and the test pressure will be 10,000 psig. The OCD Hobbs district office shall be notified a minimum of 4 hours in advance for a representative to witness all BOP pressure tests. The test shall be performed by an independent service company utilizing a test plug (no cup of J-packer). The results of the test shall be recorded on a calibrated test chart submitted to the OCD district office. BOP testing shall be conducted at:

a. Installation;
b. After equipment or configuration changes;
c. At 30 days from any previous test, and;
d. Any time operations warrant, such as well conditions.

The BOP specifications to be used during the various phases of the drilling and casing installation are included in the table below:

Casing Size	Annular Preventer	Rams
20"	26-3/4" – 3M, with diverter	None
13-3/8"	21-3/4" – 5M	Pipe & Blind/Shear – 5M
9-5/8"	13-5/8– 10M	Pipe & Blind/Shear – 10M

A diagram showing the representative BOP setup is included as Attachment 1.

6. **Auxiliary Well Control and Monitoring:** Hydraulic remote BOP operation and mudlogging to monitor returns.

7. **Mud Program and Monitoring:** Mud will be balanced for all operations with adjustment as needed based on actual wellbore conditions and is proposed as follows:

DEPTH	MUD TYPE	WEIGHT	FV	PV	YP	FL	pH
0-1,405'	FW Spud Mud	8.5-9.2	70-40	20	12	NC	10.0
1,405'-3,315'	Brine Mud	9.2-10.0	28-32	NC	NC	NC	10.0
3,315'-16,225'	FW Gel	9.5-10.0	28-32	NC	NC	NC	10.5
13,500'-1,4378'	XCD Brine	12.5-14.6	45-48	20	10	<5	10.5

Mud and all cuttings monitored with all drill cuttings recovered for disposal. Returns shall be visually and electronically monitored. In the event of H_2S, mud shall be adjusted appropriately by weight and H_2S scavengers.

8. **H_2S Safety:** This well and related facilities are not expected to have H_2S releases. However, there may be H_2S in the area. There are no private residences or public facilities in the area but a contingency plan has been developed. Permian TDS, LLC will have a company representative available to personnel throughout all operations. If H_2S levels greater than 10ppm are detected or suspected, the H_2S Contingency Plan will be implemented at the appropriate level.

H_2S Safety – There is a low risk of H_2S in this area. The operator will comply with the provisions of New Mexico Administrative Code (NMAC) 19.15.11 .

a. **Monitoring** – all personnel will wear monitoring devices.
b. **Warning Sign** – a highly visible H_2S warning sign will be placed for obvious viewing at the vehicular entrance point onto location.
c. **Wind Detection** – two (2) wind direction socks will be placed on location.
d. **Communications** – will be via cellular phones and/or radios located within reach of the driller, the rig floor and safety trailer when applicable.
e. **Alarms** – will be located at the rig floor, circulating pump/reverse unit area and the flare line and will be set for visual (red flashing light) at 15 ppm and visual and audible (115 decibel siren) at 20 ppm.
f. **Mud program** – If H_2S levels require, proper mud weight, safe drilling practices and H_2S scavengers will minimize potential hazards.
g. **Metallurgy** – all tubulars, pressure control equipment, flowlines, valves, manifolds and related equipment will be rated for H_2S service if required.

The Permian TDS, LLC H_2S Contingency Plan will be implemented if levels greater than 10ppm H_2S are detected.

9. **Geophysical Logging and Testing:** Permian TDS, LLC expects to run:

   a. Geophysical logging through the proposed injection interval will ensure the target interval remains within the Devonian and Silurian formations. Mud logging will be conducted from beneath the surface casing to total depth.
   b. An open hole gamma ray, SP, compensated density- neutron and dual resistivity log suite will be run from total depth to approximately 14,900'.
   c. A cement bond log with gamma ray and collar locator will be run (Radial, CET or equivalent) on the production casing.
   d. No cores or drill stem tests will be conducted. (The well may potentially be step rate tested in the future if additional injection pressures are required.)

10. **Potential Hazards:** H2S is a potential hazard. No abnormal pressure or temperatures are anticipated, but drilling operations will be prepared in the event that those conditions occur.

    No loss of circulation is expected to occur with the exception of drilling into the target disposal zone. All onsite personnel will be familiar with the safe operation of the equipment being used to drill this well. The maximum anticipated bottom-hole pressure is 7,000 psig and the maximum anticipated bottom-hole temperature is 210°F.

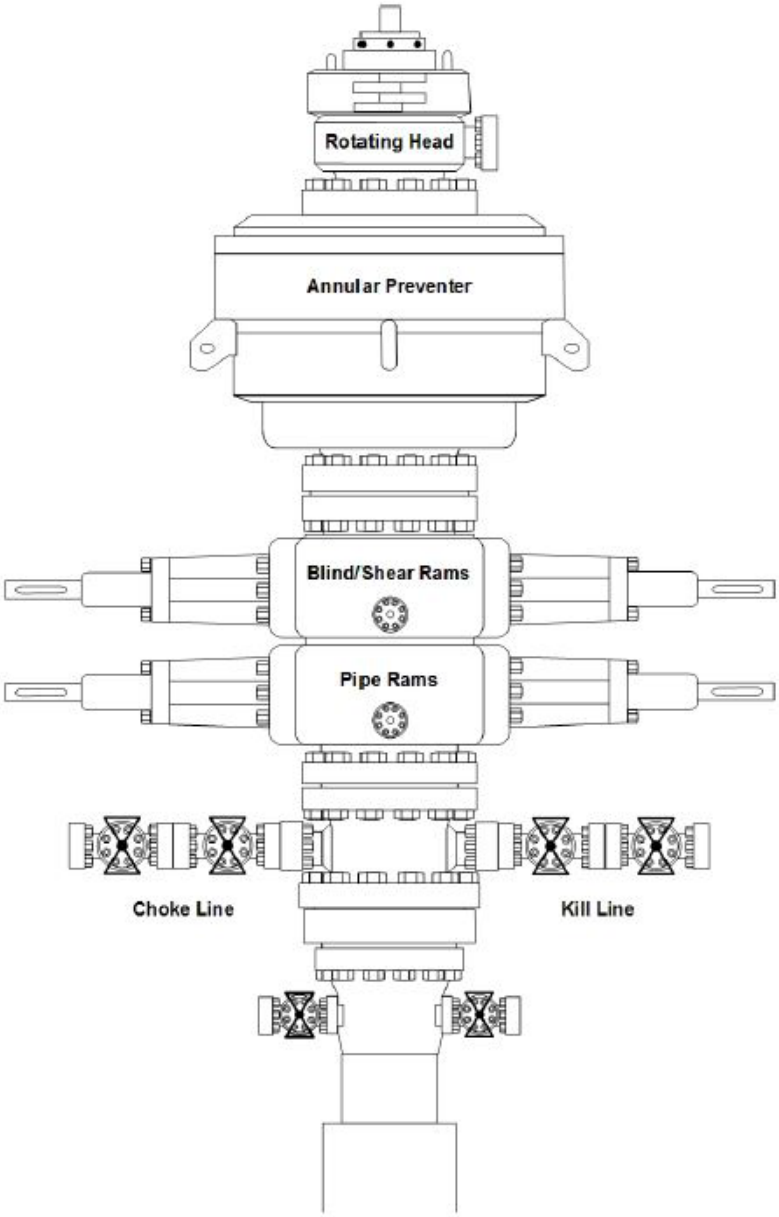
11. **Waste Disposal Management:** All drill cuttings, fluids, and other solid wastes associated with drilling and completion operations will be transported to a solid waste facility and commercial Class IID injection operation that has been approved and permitted by the Environmental Bureau of the OCD.

12. **Anticipated Drilling Commencement Date:** Upon approval of the permit for saltwater disposal (SWD), operations would begin within 30 days based on rig availability. Drilling and completion of the well will take approximately two to three weeks. Installation of the surface facility such as the secondary containment and tank battery, plumbing, injection pump(s), and other treatment and filtering associated equipment would be occurring after the well is completed. In any event, it is not expected for the construction of the surface facility of the project to last more than 90 days, pending on availability of subcontractors and equipment lead times.

13. **Completion for Salt Water Disposal:** Subsequent to SWD permit issuance from OCD and prior to commencing any work, a Notice of Intent (NOI) sundry will be submitted to complete the well for SWD and will detail the completion workover including all work otherwise described above, any change to the procedure noted herein and to perform mechanical integrity pressure testing per BLM and OCD test procedures (including appropriate OCD notification).The tubing and packer will be set at a depth of approximately 14,890 feet and the casing/tubing annulus will be filled with freshwater and corrosion inhibitor and pressure tested to the required test pressure using the standard annulus pressure test. Anticipated daily maximum volume is 30,000 barrels of water per day (bwpd) and average of 25,000 bwpd at a maximum surface injection pressure of 2,987 psig (0.2 psi/ft to the top of the injection interval). If satisfactory disposals rates cannot be achieved at default pressure of 0.2 psi/ft, Permian TDS, LLC will conduct a step-rate test and apply for an injection pressure increase 50 psig below actual parting pressure achieved during the step-rate testing.

Proposed Drilling Plan – Coombes SWD #1

Attachment 1 – Representative BOP Setup



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

ORDER

GRANTING UIC PERMIT SWD-1996

Permian TDS, LLC ("Applicant") filed an Application for Authorization to Inject (Form C-108) ("Application") with the New Mexico Energy, Minerals and Natural Resources Department, Oil Conservation Division ("OCD") to inject produced water at the Applicant's Coombes SWD No. 1 ("Well"), as more fully described in Appendix A.

THE OCD FINDS THAT:

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II Underground Injection Control ("UIC") well.

2. Applicant complied with the notice requirements of 19.15.26.8 NMAC.

3. No person filed a protest on the Application.

4. The Well will inject produced water into the Devonian-Silurian formation(s).

5. The produced water injected into the Well will be confined by layers above and below the approved injection interval.

6. No other UIC wells which inject or that are authorized to inject produced water into the same approved injection interval are permitted within 4 mile(s) of the Well.

7. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

8. Applicant affirmed in a sworn statement by a qualified person that the injection of produced water over the predicted service life of the Well will not increase the potential for an induced seismic event.

9. Applicant is in compliance with 19.15.5.9 NMAC.

10. Applicant agrees to the Terms and Conditions in the attached Permit.

THE DIVISION CONCLUDES THAT:

1. OCD has authority under the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, and its implementing regulations, 19.15.1 *et seq.* NMAC, and under the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, to issue this permit for an UIC Class II injection well. *See* 40 CFR 147.1600.

2. Based on the information and representations provided in the Application, the proposed injection, if conducted in accordance with the Application and the terms and conditions of the attached Permit, (a) will not result in waste of oil and gas; (b) will not adversely affect correlative rights; (c) will protect underground sources of drinking water; and (d) will protect the public health and environment.

3. Applicant is authorized to inject subject to the terms and conditions of the Permit.

IT IS THEREFORE ORDERED THAT:

The Applicant be granted UIC Permit SWD-1996 for Well Coombes SWD No. 1.

ADRIENNE SANDOVAL
OCD DIRECTOR

Date: 12/05/2022

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

APPENDIX A – AUTHORIZED INJECTION

Permittee: Permian TDS, LLC
OGRID No.: 306958

Well name: Coombes SWD No. 1

Surface location: 1630 feet FSL 200 feet FEL Section 22, Township 20 South, Range 33 East, NMPM, Lea County, New Mexico (Lat: 32.5558628, Long: -103.6431607 NAD83)

Bottom hole location (if different): NA

Type of completion: Open Hole

Type of injection: Commercial

Injection fluid: Class II UIC (Produced Water)

Injection interval: 14,935-16,225 feet

Injection interval thickness (feet): 1,350 feet

Confining layer(s): Woodford (Upper) Montoya (lower)

Prohibited injection interval(s): Any formation above or below the permitted injection interval including lost circulation intervals.

Liner, tubing, and packer set: Injection shall occur through 5.5-inch (OD) or smaller tubing placed within the 7.625-inch liner (with a weight of 39 pounds per foot) and 7-inch (OD) or smaller tubing placed in the 9.625-inch intermediate casing above the 7.625-inch liner and packer set within 100 ft from the top of the injection interval.

Maximum daily injection rate: 30,000 Barrels per day.

Maximum surface injection pressure: 2,987 psi

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

UIC CLASS II PERMIT SWD- 1996

Pursuant to the Oil and Gas Act, NMSA 1978, §§70-2-1 *et seq.*, ("Act") and its implementing regulations, 19.15.1 *et seq.* NMAC, ("Rules") and the federal Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*, and its implementing regulations, 40 CFR 144 *et seq.*, the Oil Conservation Division ("OCD") issues this Permit to Permian TDS, LLC., ("Permittee") to authorize the construction and operation of a well to inject produced water at the location and under the terms and conditions specified in this Permit and Appendix A.

I. GENERAL CONDITIONS

A. AUTHORIZATION

1. Scope of Permit. This Permit authorizes the injection of produced water into the well described on Appendix A ("Well"). Any injection not specifically authorized by this Permit is prohibited. Permittee shall be the "operator" of the Well as defined in 19.15.2.7(O)(5) NMAC.

a. Injection is limited to the approved injection interval described in Appendix A. Permittee shall not allow the movement of fluid containing any contaminant into an underground source of drinking water ("USDW") if the presence of that contaminant may cause a violation of a Primary Drinking Water Regulation adopted pursuant to 40 CFR Part 142 or that may adversely affect the health of any person. [40 CFR 144.12(a)]

b. The wellhead injection pressure for the Well shall not exceed the value identified in Appendix A.

c. Permittee shall not commence to drill, convert, or recomplete the Well until receiving this approval and until OCD approves a Form C-101 Application for Permit to Drill ("APD") pursuant to 19.15.14 NMAC or receives an approved federal Form 3160-3 APD for the Well. [40 CFR 144.11; 19.15.14.8 and 19.15.26.8 NMAC]

d. Permittee shall not commence injection into the Well until the Permittee complies with the conditions in Section I. C. of this Permit.

e. This Permit authorizes injection of any UIC Class II fluid or oil field waste defined in 19.15.2.7(E)(6) NMAC.

f. This Permit does not authorize injection for an enhanced oil recovery project as defined in 19.15.2.7(E)(2) NMAC.

2. Notice of Commencement. Permittee shall provide written notice on Form C-103 to OCD E-Permitting and notify OCD Engineering Bureau by email of the submittal no later than two (2) business days following the date on which injection commenced into the Well. [19.15.26.12(B) NMAC]

3. Termination. Unless terminated sooner, this Permit shall remain in effect for a term of twenty (20) years beginning on the date of issuance. Permittee may submit an application for a new permit prior to the expiration of this Permit. If Permittee submits an application for a new permit, then the terms and conditions of this Permit shall remain in effect until OCD denies the application or grants a new permit.

a. This Permit shall terminate one (1) year after the date of issuance if Permittee has not commenced injection into the Well, provided, however, that OCD may grant a single extension of no longer than one (1) year for good cause shown. Permittee shall submit a written request for an extension to OCD Engineering Bureau no later than thirty (30) days prior to the deadline for commencing injection.

b. One (1) year after the last date of reported injection into the Well, OCD shall consider the Well abandoned, the authority to inject pursuant to this Permit shall terminate automatically, and Permittee shall plug and abandon the Well as provided in Section I. E. of this Permit. Upon receipt of a written request by the Permittee no later than one year after the last date of reported injection into the Well, OCD may grant an extension for good cause. [19.15.26.12(C) NMAC]

B. DUTIES AND REQUIREMENTS

1. Duty to Comply with Permit. Permittee shall comply with the terms and conditions of this Permit. Any noncompliance with the terms and conditions of this Permit, or of any provision of the Act, Rules or an Order issued by OCD or the Oil Conservation Commission, shall constitute a violation of law and is grounds for an enforcement action, including revocation of this Permit and civil and criminal penalties. Compliance with this Permit does not relieve Permittee of the obligation to comply with any other applicable law, or to exercise due care for the protection of fresh water, public health and safety and the environment. The contents of the Application and Appendix A shall be enforceable terms and conditions of this Permit. [40 CFR 144.51(a); 19.15.5 NMAC]

2. Duty to Halt or Reduce Activity to Avoid Permit Violations. Permittee shall halt or reduce injection to avoid a violation of this Permit or other applicable law. It shall not be a defense in an enforcement action for Permittee to assert that it would have been necessary to halt or reduce injection in order to maintain compliance with this Permit. [40 CFR 144.51(c)]

3. Duty to Mitigate Adverse Effects. Permittee shall take all reasonable steps to minimize, mitigate and correct any waste or effect on correlative rights, public health, or the

environment resulting from noncompliance with the terms and conditions of this Permit. [40 CFR 144.51(d)]

4. Duty to Operate and Maintain Well and Facilities. Permittee shall operate and maintain the Well and associated facilities in compliance with the terms and conditions of this Permit. [40 CFR 144.51(e)]

5. Duty to Provide Information. In addition to any other applicable requirement, Permittee shall provide to OCD by the date and on the terms specified by OCD any information which OCD requests for the purpose of determining whether Permittee is complying with the terms and conditions of this Permit. [40 CFR 144.51(h)]

6. Private Property. This Permit does not convey a property right or authorize an injury to any person or property, an invasion of private rights, or an infringement of state or local law or regulations. [40 CFR 144.51(g)]

7. Inspection and Entry. Permittee shall allow OCD's authorized representative(s) to enter upon the Permittee's premises where the Well is located and where records are kept for the purposes of this Permit at reasonable times and upon the presentation of credentials to:

a. Inspect the Well and associated facilities;

b. Have access to and copy any record required by this Permit;

c. Observe any action, test, practice, sampling, measurement or operation of the Well and associated facilities; and

d. Obtain a sample, measure, and monitor any fluid, material or parameter as necessary to determine compliance with the terms and conditions of this Permit. [40 CFR 144.51(i)]

8. Certification Requirement. Permittee shall sign and certify the truth and accuracy of all reports, records, and documents required by this Permit or requested by OCD. [40 CFR 144.51(k)]

9. Financial Assurance. Permittee shall provide and maintain financial assurance for the Well in the amount specified by OCD until the Well has been plugged and abandoned and the financial assurance has been released by OCD. [40 CFR 144.52; 19.15.8.12 NMAC]

C. PRIOR TO COMMENCING INJECTION

1. Construction Requirements.

a. Permittee shall construct the Well as described in the Application,

Appendix A and as required by the Special Conditions.

b. Permittee shall construct and operate the Well in a manner that ensures the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

2. Tests and Reports. Permittee shall complete the following actions prior to commencing injection in the Well.

a. Permittee shall obtain and comply with the terms and conditions of an approved APD prior to commencing drilling of the Well, or other OCD approval, as applicable, prior to converting or recompleting the Well. If the APD is approved by the OCD, the Well shall be subject to the construction, testing, and reporting requirements of 19.15.16 NMAC.

b. Permittee shall circulate to surface the cement for the surface and intermediate casings. If cement does not circulate on any casing string, Permittee shall run a cement bond log ("CBL") to determine the top of cement, then notify the OCD Engineering Bureau and the appropriate OCD Inspection Supervisor and submit the CBL prior to continuing with any further cementing on the Well. If the cement did not tie back into next higher casing shoe, Permittee shall perform remedial cement action to bring the cement to a minimum of two hundred (200) feet above the next higher casing shoe.

c. If a liner is approved for the construction of the Well, Permittee shall run and submit to OCD E-Permitting and notify the OCD Engineering Bureau by email, a CBL for the liner to demonstrate placement cement and the cement bond with the tie-in for the casing string.

d. Permittee shall submit the mudlog, geophysical logs, and a summary of depths (picks) for the contacts of the formations demonstrating that only the permitted formation is open for injection. OCD may amend this Permit to specify the depth of the approved injection interval within the stratigraphic interval requested in the application. If Permittee detects a hydrocarbon show during the drilling of the Well, it shall notify OCD Engineering Bureau by email and obtain written approval prior to commencing injection into the Well.

e. Permittee shall obtain and submit on a Form C-103 a calculated or measured static bottom-hole pressure measurement representative of the completion in the approved injection interval.

f. Permittee shall conduct an initial mechanical integrity test ("MIT") on the Well in compliance with the terms and conditions of this Permit and 19.15.26 NMAC, and shall not commence injection into the Well until the results of the initial MIT have been approved by the appropriate OCD Inspection Supervisor. [19.15.26.11(A) NMAC]

g. OCD retains authority to require a wireline verification of the completion and packer setting depths in this Well. [19.15.26.11(A) NMAC]

D. OPERATION

1. Operation and Maintenance.

a. Permittee shall equip, operate, monitor and maintain the Well to facilitate periodic testing, assure mechanical integrity, and prevent significant leaks in the tubular goods and packing materials used and significant fluid movements through vertical channels adjacent to the well bore. [19.15.26.10(A) NMAC]

b. Permittee shall operate and maintain the Well and associated facilities in a manner that confines the injected fluid to the approved injection interval and prevents surface damage and pollution by leaks, breaks and spills. [19.15.26.10(B) NMAC]

c. OCD may authorize an increase in the maximum surface injection pressure upon a showing by the Permittee that such higher pressure will not result in the migration of the disposed fluid from the approved injection interval or induced seismicity. Such proper showing shall be demonstrated by sufficient evidence, including an acceptable step-rate test.

d. If OCD has reason to believe that operation of the Well may have caused or determined to be contributing to seismic activity, Permittee shall, upon OCD's written request:

i. Take immediate corrective action, which could include testing and evaluating of the injection interval and confining layers; suspending or reducing of the rate of injection or maximum surface injection pressure, or both; and providing increased monitoring of the Well's operation; and

ii. Submit a remedial work plan or an application to modify the Permit to implement the corrective action, plug back the injection interval, or incorporate another modification required by OCD.

OCD may approve the remedial work plan, modify the Permit or issue an emergency order or temporary cessation order as it deems necessary.

2. Pressure Limiting Device.

a. The Well shall be equipped with a pressure limiting device, which is in workable condition and can be tested for proper calibration at the well site,

that shall limit surface tubing pressure to the maximum surface injection pressure specified in Appendix A.

b. Permittee shall test the pressure limiting device and all gauges and other metering requirement to ensure their accuracy and proper function no less than every five (5) years.

3. Mechanical Integrity. Permittee shall conduct a MIT prior to commencing injection, at least every five (5) years after the date of the previous MIT, and whenever the tubing is removed or replaced, the packer is reset, mechanical integrity is lost, Permittee proposes to transfer the Well, or requested by OCD.

a. MITs shall be conducted in accordance with 19.15.26 NMAC.

b. Permittee shall submit a sundry notice on Form C-103 of intent to install or replace injection equipment or conduct a MIT no later than three (3) business days prior to the event.

c. Permittee shall report the result of a MIT no later than two (2) business days after the test.

d. Permittee shall cease injection and shut-in the Well no later than twenty-four (24) hours after discovery if:

i. The Well fails a MIT; or

ii. Permittee observes conditions at the Well that indicate the mechanical failure of tubing, casing, or packer.

e. Permittee shall take all necessary actions to address the effects resulting from the loss of mechanical integrity in accordance with 19.15.26.10 NMAC.

f. Permittee shall conduct a successful MIT pursuant to 19.15.26.11 NMAC, including written approval from OCD prior to recommencing injection and the requirements contained in Section I G.3.

4. Additional Tests. Permittee shall conduct any additional test requested by OCD, including but not limited to step-rate tests, tracer surveys, injection surveys, noise logs, temperature logs, and casing integrity logs [19.15.26.11(A)(3) NMAC]

5. Records.

a. Permittee shall retain a copy of each record required by this Permit for a period of at least five (5) years and shall furnish a copy to OCD upon request. [40 CFR 144.51(h)]

b. Permittee shall retain a record of each test, sample, measurement, and certification of accuracy and function collected for the Well, including:

i. Date, location, and time of sample, measurement or calibration;

ii. Person who conducted the sample event, -measurement or calibration;

iii. Calibration of gauge or other equipment in accordance with the manufacturer's specifications;

iv. Description of method and procedures;

v. Description of handling and custody procedures; and

vi. Result of the analysis.

E. PLUGGING AND ABANDONMENT

1. Upon the termination of this Permit, Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

2. If Permittee has received an extension pursuant to Section I. A. 2. b., Permittee shall apply for approved temporary abandonment pursuant to 19.15.25 NMAC.

3. If this Permit expires pursuant to 19.15.26.12 NMAC and OCD has not issued a new permit, then Permittee shall plug and abandon the Well and restore and remediate the location in accordance with 19.15.25 NMAC.

4. Permittee's temporary abandonment of the Well shall not toll the abandonment of injection in accordance with 19.15.26.12(C) NMAC.

F. REPORTING

1. Monthly Reports. Permittee shall submit a report using Form C-115 using the OCD's web-based online application on or before the 15th day of the second month following the month of injection, or if such day falls on a weekend or holiday, the first workday following the 15th, with . the number of days of operation, injection volume, and injection pressure. [19.15.26.13 NMAC; 19.15.7.24 NMAC]

2. Corrections. Permittee shall promptly disclose to OCD any incorrect information in the Application or any record required by this Permit and submit corrected information. [40 CFR 144.51(h)(8)]

G. CORRECTIVE ACTION

1. Releases. Permittee shall report any unauthorized release of injection fluid at the Well or associated facilities in accordance with 19.15.29 and 19.15.30 NMAC.

2. Failures and Noncompliance. Permittee shall report the following incidents to appropriate OCD Inspection Supervisor and OCD Engineering Bureau verbally and by e-mail no later than 24 hours after such incident:

a. Any mechanical integrity failures identified in Section I. D. 3. d;

b. The migration of injection fluid from the injection interval [19.15.26.10 NMAC]; or

c. A malfunction of the Well or associated facilities that may cause waste or affect the public health or environment, including: (a) monitoring or other information which indicates that a contaminant may affect a USDW; or (b) noncompliance or malfunction which may cause the migration of injection fluid into or between USDWs. [40 CFR 144.51(l)(6)]

3. Corrective Action. Permittee shall submit a written report describing the incident in Sections I.G.1 or I.G.2, including a corrective active plan, no later than five (5) calendar days after discovery of the incident. [40 CFR 144.51(l)(6)] For an unauthorized release, Permittee also shall comply with the site assessment, characterization and remediation requirements of 19.15.29 and 19.15.30 NMAC.

4. Restriction or Shut-In. OCD may restrict the injected volume and pressure or shut-in the Well if OCD determines that the Well has failed or may fail to confine the injected fluid to the approved injection interval or has caused induced seismicity until OCD determines that Permittee has identified and corrected the failure. [19.15.26.10(E) NMAC]

H. PERMIT CHANGES

1. Transfer. This Permit shall not be transferred without the prior written approval of OCD. Permittee shall file Form C-145 for a proposed transfer of the Well. OCD may require, as a condition of approving the transfer, that this Permit be amended to ensure compliance and consistency with applicable law. If the Well has not been spud prior to the transfer, the OCD may require that the new operator reapply and submit to the OCD a new Form C-108 prior to constructing and injecting into the well. [19.15.26.15 NMAC; 19.15.9.9 NMAC]

2. Insolvency. Permittee shall notify OCD Engineering Bureau of the commencement of a voluntary or involuntary proceeding in bankruptcy which names Permittee or an entity which operates the Well on behalf of Permittee as a debtor no later than ten (10) business days after the commencement of the proceeding.

3. OCD Authority to Modify Permit and Issue Orders

a. The OCD may amend, suspend, or revoke this Permit after notice and an opportunity for hearing if it determines that:

i. The Permit contains a material mistake;

ii. Permittee made an incorrect statement on which OCD relied to establish a term or condition of the Permit or grant this Permit;

iii. this Permit must be amended to ensure compliance and consistency with applicable law, including a change to the financial assurance requirements;

iv. The Well's operation may affect the water quality of fresh water;

v. Injected fluid is escaping from the approved injection interval;

vi. Injection may be caused or contributed to seismic activity: or

vii. Injection may cause or contribute to the waste of oil, gas or potash resources or affect correlative rights, public health, or the environment.

b. OCD retains jurisdiction to enter such orders as it deems necessary to prevent waste and to protect correlative rights, protect public health, and the environment.

c. OCD retains jurisdiction to review this Permit as necessary and no less than once every five (5) years, and may determine whether this Permit should be modified, revoked and reissued, or terminated. [40 CFR 144.36(a)]

4. Permittee Request to Modify Permit. Permittee may apply to modify the terms of this Permit.

a. **Minor Modifications**. OCD may make a minor modification to this Permit without notice and an opportunity for hearing for:

i. Non-substantive changes such as correction of typographical errors;

ii. Requirements for more frequent monitoring or reporting;

iii. Changes to the Well construction requirements provided that any alteration shall comply with the conditions of the Permit and does not change the Area of Review considered in the application for the Permit;

iv. Amendments to the plugging and abandonment plan;

v. Changes in the types of fluids injected which are consistent with sources listed in the application for the Permit and do not change the classification of the Well;

vi. Corrections of the actual injection interval if within the approved formation; or

vii. Transfer of a Permit for a Well that has been spud. [40 CFR 144.41]

b. **Major Modifications.** OCD shall require notice and an opportunity for hearing for any modification that is not minor. For such modifications, Permittee shall submit Form C-108 and comply with the notice requirements of 19.15.26 NMAC.

II. SPECIAL CONDITIONS

Permittee shall comply with the following special conditions:

The operator shall circulate to surface the cement for the surface and intermediate casings.

III. ATTACHMENT

Well Completion Diagram as Provided in the Application

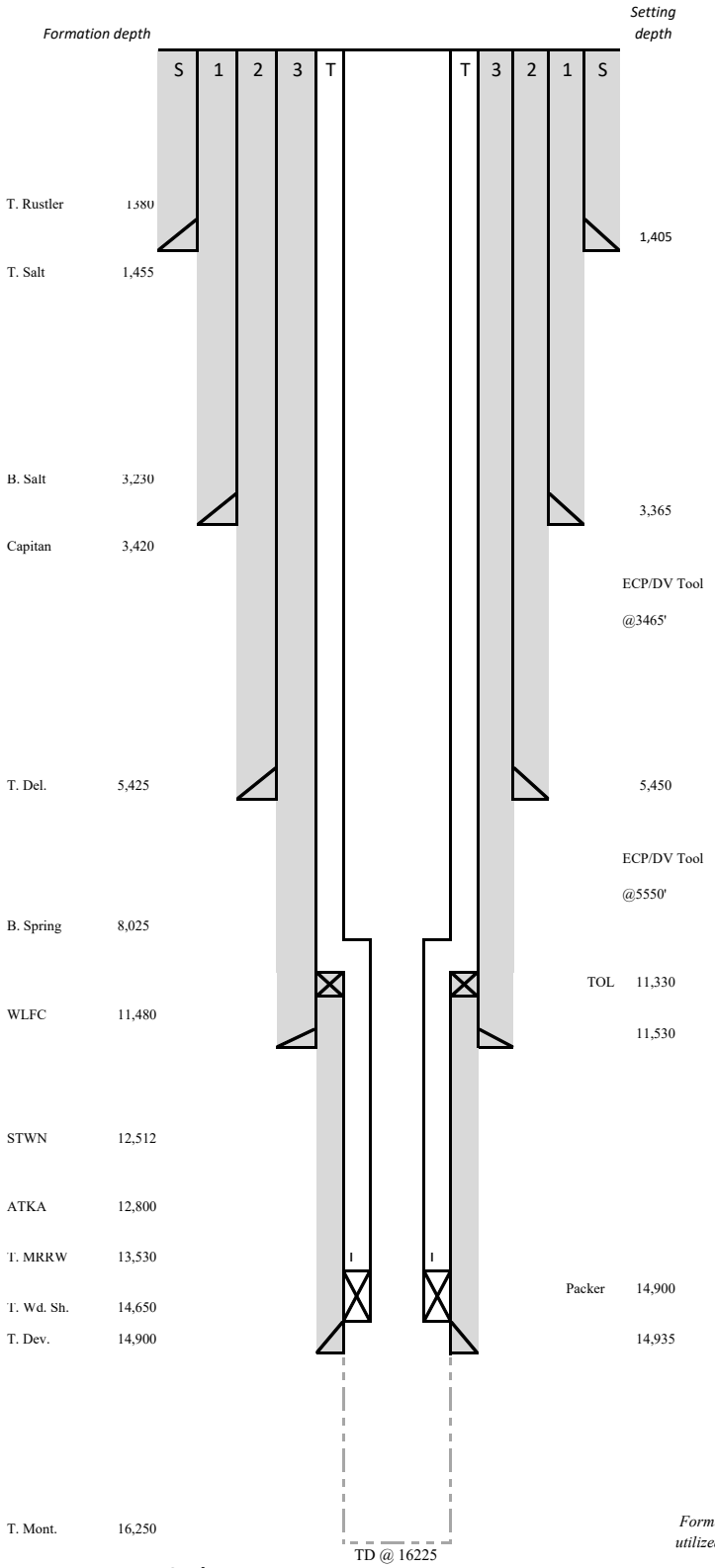
INJECTION WELL DATA SHEET

OPERATOR: **Permian TDS, LLC**

WELL NAME & NUMBER: **Coombes SWD #1**

WELL LOCATION					
1630' FSL & 200' FEL	**I**	**22**	**20S**	**33E**
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC



Not to Scale

WELL CONSTRUCTION DATA

Surface Casing

Hole Size **26** in. Casing Size: **20** in.
Setting Depth: **Surface** ft. to **1405** ft.
Cemented with: **961** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

1st Intermediate Casing

Hole Size **18.5** in. Casing Size: **16** in.
Setting Depth: **Surface** ft. to **3,365** ft.
Cemented with: **809** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

2nd Intermediate Casing

Hole Size **14.75** in. Casing Size: **13.375** in.
Setting Depth: **Surface** ft. to **5,450** ft.
Cemented with: **884** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

3rd Intermediate Casing

Hole Size **12.25** in. Casing Size: **9.625** in.
Setting Depth: **Surface** ft. to **11,530** ft.
Cemented with: **1990** sx. or _____ ft³
Top of Cement: **Surface** Method Determined **Circulation**

Liner

Hole Size **8.5** in. Casing Size: **7.625** in.
Setting Depth: **11,330** ft. to **14,935** ft.
Cemented with: **211** sx. or _____ ft³
Top of Cement: **11330** TOL Method Determined **CBL**

Open Hole Injection Interval

14,935 ft. to **16,225** ft

Formation tops have been extrapulated from control wells in the vicinity. During drilling activites, mud and other logs will be utilized to confirm depths and thicknesses of geologic formations. Should logging data indicate adjustments are required to the casing and cement program, applicable Sundry Notices will be filed with the NMOCD.

INJECTION WELL DATA SHEET

Tubing Size: **7" tapered to 5.5"** Lining Matrial: **Fiberglass**

Type of Packer: **5.5" Perma-Pak or Equivalent (Inconel)**

Packer Setting Depth: **14,900** Ft.

Other Type of Tubing/Casing Seal (if applicable): **Not Applicable**

Additional Data

1. Is this a new well drilled for injection? **XXX** Yes _____ No

   If no, for what purpose was the well oringally drilled? **N/A**

2. Name of the Injection Formation: **Devonian-Silurian**

3. Name of Field or Pool (if applicable): **SWD; Devonian-Silurian**

4. Has the well ever been perforated in any other zones (s)" List all such perforated intervals and give plugging detail, i.e. sacks of cent or plugs(s) used. **N/A**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:

name	*depth*
T. Rustler	**1,380**
T. Salt	**1,455**
B. Salt	**3,230**
T. Yates	**3,315**
T. Capitan	**3,420**
T. Delaware	**5,425**
T. Bone Spring	**8,025**
T. Wolfcamp	**11,480**
T. Strawn	**12,512**
T. Atoka	**12,800**
T. Morrow	**13,530**
T. Woodford	**14,650**
T. Devonian	**14,900**
T. Montoya	**16,250**

There are no known oil and gas zones underlying the proposed injection interval

III. Well Data

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1)

General Well Information	
Operator	Permian TDS, LLC
Lease Name & Well No.	Coombes SWD #1
Location	1630' FSL & 200' FEL, UL I, Sec. 22, T20S, R33E

(2)

Casing Information							
String	Size	Weight/Grade	Setting Depth	Sacks of Cement	Hole Size	Estimated Top of Cement	Method of Determination
Surface	20"	106.5# J-55 STC	1,405'	961	26"	Surface	Circulation
Intermediate 1	16"	75# J-55 STC	3,365'	809	18.5	Surface	Circulation
Intermediate 2	13.375"	61# J-55 FJ	5,450'	884	14.75"	Surface	Circulation
Intermediate 3	9.625"	40# HCL-80 BTC	11,530'	1,990	12.25"	Surface	Circulation
Liner	7.625"	39# P-110 FJ	11,330-14935'	211	8.5"	11,330 (TOL)	Volumetric
Open Hole	NA	NA	14,935-16,225	NA	6.5"	NA	CBL

(3)

Description of Tubing			
Size	Weight/Grade	Lining Material	Setting Depth
7"	26# HCP-110 FJ	Fiberglass Lined	11,330'
5.5"	17# HCL-80 FJ	Fiberglass Lined	14,890'

(4)

Packer Information	
Type	Setting Depth
5.5" Perma-Pak or Equivalent (Inconel)	14,900'

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

	Injection Information	
(1)	Name of Injection Formation:	Devonian -Silurian, Montoya
(2)	Injection Interval:	14,935' to 16,225'
	Perforated or Open-Hole:	Open Hole
(3)	Purpose of Well:	New Drill for Salt Water Disposal
(4)	Other Perforated Intervals:	None

(5)

Estimated Depth of Various Formations Including Oil and Gas Zones (Ft. bgs)	
T. Rustler	1,380
T. Salt	1,455
B. Salt	3,230
Yates	3,315
T. Capitan	3,420
T. Delaware	5,425
T. Bone Spring	8,025
T. Wolfcamp	11,480
T. Strawn	12,512
T. Atoka	12,800
T. Morrow	13,530
T. Woodford Shale	14,650
T. Devonian	14,900
T. Montoya	16,250

There are no known oil and gas zones beneath the proposed injection zone.